The American Artisan
And Hardware Record

Vol. 56. No. 16. CHICAGO, OCTOBER 17, 1908. $2.00 Per Year.

All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1908 Catalog "R." Prices on Application
COLUMBUS BOLT WORKS, Columbus, O.

GET THE LIVE LINE
"AMERICAN SEAL"
Elastic Oil Roofing Cement, Stove Putty and Asbestos Furnace Cement
For Furnaces, Stoves, Ranges and Roofs.
Jobbers write to-day for prices
THE
Wm. Connors Paint Mfg. Co.
Makers. TROY, N. Y.
Western Agents: Friedley-Voshardt Co., 194 Mather St., Chicago, Ill.
Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

Trying to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

MATCHLESS
Spring and Pivot Hinges
Floor Hinges, Jamb Hinges and Hardware Specialties.
The fact that Matchless Spring Hinges have been on the market since 1895 and that in that time not one set has required repairs from fault of hinge speaks very well for their serviceability and wearing qualities.
If your Jobber cannot furnish them write us.
LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

NEW DESIGN WORLD'S BEST
TUBULAR TRACK DOOR HANGER

We have increased the diameter of the wheel to 2¾ in., making it the easiest running Hanger on the market.
The supplementary wheel prevents derailment. Frame is made of the best grade malleable iron. Finished in Aluminum and each pair packed in an individual box, complete with bolts. The track brackets are slidable and may be placed at any point desired. We do not sell catalog houses. Write for prices.
SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio Hamilton, Ont., Can.

"NEVER-BREAK"
TRADE MARK

Catalog Free
"NEVER-BREAK"
STEEL SPIDERS, GRIDDLES AND KETTLES
WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast Iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods.

The Highest Grade File Made.
DELTA
TRADE MARK DELTA
DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.
FILES OF QUALITY
FILES
The File You Will Eventually Use.

PULLMAN
SASH BALANCES

Are you selling them?
IN USE EVERYWHERE
Send us your orders
PULLMAN MFG. COMPANY
SOPHIA STREET
ROCHESTER, N. Y., U. S. A

Porcelain Enamel Formulas
Any kind or color, for cast iron and sheet steel, with full instructions.
Start now—and improve quality of ware in old plants.
34 Years' Practical Experience
JOHN PEIL, Columbus, O.

100 Tinners' Patterns
Complete for
$1.00
Sent Postpaid on Receipt of Price
Daniel Stern
355 Dearborn Street - Chicago

"The First Aid" To a Good Stove Business

Cinderella Base Burners

The Great 5-Flue Line

With 50 to 100 per cent more radiation in Backs and Bases than any stoves sold at this price.

Made in 3 Distinct Series—Only One Quality

The difference in the Quantity of Nickel makes the difference in Price.

We Make no Apology for our Prices

Any stove now sold to dealers at 4 to 7 dollars more can be built in our Factory and sold at our prices, provided the makers are satisfied with our per cent of profit.

Stove & Range Co. of Pittsburgh

Pittsburgh, Pa.

Western Agency:

W. D. SAGER . . . . CHICAGO, ILL.

The 6th in a Series of Reasons Why the KELSEY is the Best Warm Air System

Where You Can Use the KELSEY System

Ordinary "hot air" furnaces have their limits, because they can't be installed, with satisfaction, in large country residences or public buildings.

Steam and Hot Water Systems have their limits, because the cost to install and maintain is almost prohibitive in small dwellings and cottages.

But you can install the KELSEY, and it is being used with perfect satisfaction, in small, inexpensive cottages, in large churches and public schools, in homes of the average size, in palatial country homes exposed on all sides, and even in the best class of city residences in New York City.

The positive ventilation afforded, the health, economy and ease of management, and the actual results secured with the KELSEY System, have caused it to be most favorably regarded by home owners wherever sold.

The KELSEY Mechanical (Fan) System for churches, schools and large residences, is being more extensively used than ever this year.

Dealers or Heating Engineers who will examine the KELSEY construction, will realize that no other heater is so well adapted for heating large volumes of air under high velocity.

There is hardly any limit to KELSEY Heating.

If you want the exclusive agency for a Warm Air System of Heating and Ventilating, that you can install profitably in almost any kind of a building, let us tell you more about the

KELSEY WARM AIR GENERATOR

(Registered in U. S. Patent Office)

KELSEY HEATING COMPANY, Syracuse, N. Y.

NEW YORK: 156 Fifth Avenue PHILADELPHIA: 24 South 7th Street

CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 W. Lake Street

James Smart Mfg. Co., BROCKVILLE, Ont., Sole Makers for Canada

THIS is the only right hand Reservoir that will heat the water HOT in 15 minutes WITHOUT DETRACTING from the baking of the oven.

PATENT APPLIED FOR

This reservoir holds 11 gallons, Copper tinned inside. Easily cleaned—simply remove plug from drain tube in bottom.

The Stove man that gets the Agency for this range in your town will be in a good position to control the Steel Range business.

Get ahead of your competitor by writing to-day for descriptive circular and price list.

ALLEN MFG. COMPANY

STEEL RANGE SPECIALISTS

NASHVILLE, TENN.

Distributors:
JNO. T. ALLEN & CO
Los Angeles, Cal.

Distributors:
WORMNEST STOVE & RANGE CO.
Grand Rapids, Mich.

Radiant Home Specialties

THE NEW

Radiant Air Blast

"B" SERIES

For Soft Coal, Hard Coal, Coke and Wood

This stove has the improved Radiant Home Air Blast Fire Pot, (patent just granted). The improved projecting cells gives each cell a greater fire radius, thus giving a quicker and stronger action, at the same time retaining all the features of the original pot. Like the original, this pot has a five year guarantee.

Steel Body, of best grade Oak Body Steel;
Grates of our own design draw center;
Feed Doors, double with Smoke Curtain;
Base, tightly constructed, Shaker Door;
Magazine, if desired, except in Nos. 10, 12, 20.

For hard coal order half height cells.

Eight Sizes Nos. 10, 12, 14, 16, 18, 20 Nos. 18 Ex. 20 Ex.

A HIGH-GRADE, LOW-PRICED STOVE

THE RADIANT HOME

Force Draft Air Blast

Radiant Home Air Blast Fire Pot. Guaranteed for Five Years.

BODIES
Steel or Cast.

DOORS
Mica or Solid.

MAGAZINE
In all except No. 21.

Patented Force Draft Ring
Radiant Home Air Blast Fire Pot
Cast Sections Finely Decorated
Base With Shaker Door
Grates, Special Draw Center

For soft coal, hard coal, coke and wood. Order Half Height Cells for hard coal.

Germer Stove Company

WESTERN BRANCH:
251-247 Newberry Ave., CHICAGO

ERIE, PENNSYLVANIA

BORN'S
New Air Blast Heater

Made from Brand New Patterns

A combination of high class designing, skillful workmanship and clever ideas in which no good feature is lacking.

It is a stove of to-day, standing for comfort with economy, and elegance without sacrifice of utility. So ingeniously contrived that smoke and gases are turned into heat, and air is burned like fuel.

Advantages:

Extra deep air-cell fire pot; hot blast ring connecting with top of each air cell; extra large ash pit, dust tight, with ash pan 4½" deep, wide deflector ring for forcing heat down to floor; heavy, well-fitted castings. Attractive design and finish; seven sizes, 12" to 21" fire pots.

This line is worth investigating no matter what you now handle. Write now for catalogue and prices.

THE
Born Steel Range Co.
CLEVELAND, OHIO

We Mean What We Say When We Tell You that

LANDAY
Matchless Steel Ranges

Are the

MOST SALABLE, MOST RELIABLE
MOST SERVICEABLE, MOST DURABLE

Ranges on the Market

The ranges themselves "make good" these assertions. They have all the requisites of the perfect range, being correct in every detail. They can always be relied upon to give perfect satisfaction. The materials used in their construction are the very best obtainable.

No faults—no weaknesses—no complaints.

Dealers are finding **Matchless Ranges** THE trade winners and they don't hesitate to push them because they know they are right. Isn't this the very line you are looking for? May be the agency for your locality is open. Write for it. At least write for our catalog.

No. 2500
Weight 435 lbs. Price net - $21.85

Yes OUR GUARANTEE BOND
Guaranteeing the fire linings for three years goes with this range as it does with every
LANDAY MATCHLESS STEEL RANGE

Choice Territory Open For Hustling Salesmen.

LANDAY STEEL RANGE CO., 2621 N. 15th St., St. Louis, Mo.

A GOOD THING for the RIGHT DEALER

Better Than Most

FOSTER'S OPAL

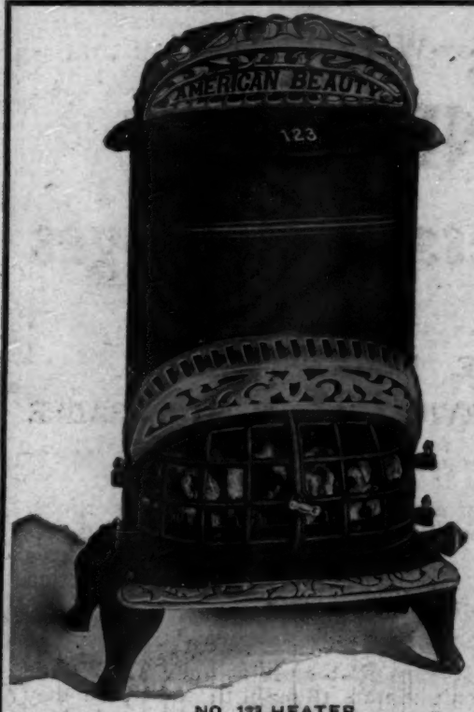
As Good as the Best

Made in Nos. 8-16, 8-18, 8 and 9-20. All sizes have Duplex Grate.

If desired all sizes can be furnished with STEEL HIGH CLOSET, RESERVOIR, WATER FRONT, OVEN THERMOMETER AND TOWEL ROD.

One good, energetic dealer is desired in every town to handle this range. Inquiries are earnestly solicited from all such. Write to-day.

THE FOSTER STOVE COMPANY, IRONTON, OHIO



NO. 123 HEATER.

No. 140 RANGE.

Our line of heaters for both natural and artificial gas is complete. The catalogue and price list are yours for the asking, and our proposition is attractive. Get a reliable line with real "talking points."

A Customer just writes us: "We have handled the high-priced——line of gas ranges for a number of years, but for several months have been selling the "American Beauty." We find it gives even better satisfaction and costs less, consequently we are able to sell at lower prices and make a better profit."

It is on just such testimony as this that we are building up a rapidly increasing volume of trade.

WILL IT NOT PAY YOU TO INVESTIGATE?

AMERICAN BEAUTY STOVE COMPANY, Erie, Penn.

WHY NOT

WHITE'S POPLAR

TAKE ADVANTAGE

OF

A BARGAIN

SEND US THE INQUIRY
THE ORDER WILL
FOLLOW

WHITE'S NECTAR

THOMAS WHITE STOVE COMPANY

QUINCY, ILLINOIS

PLACE YOUR ORDERS

With the Old
Reliable

OHIO STOVE CO.

STOVES AND RANGES

SATISFACTORY SERVICE
ASSURED
UNDER ENTIRE
NEW MANAGEMENT

PORTSMOUTH, O.

IT IS OUR AIM

QUALITY STOVES RANGES SURE TO PLEASE

to manufacture stoves and ranges of unquestioned merit and individuality.

IT SHOULD BE YOUR AIM

to always supply your customers with goods bearing just these qualities.

Quality Stoves and Ranges

lead in exclusive features, finish and beauty of design, and are guaranteed to be free from any defects and as perfect as it is possible to make them. The prices are no higher than for goods of less merit.

Write for our Catalog

Quality Stove & Range Co., Belleville, Ill.

Munsell's Mica

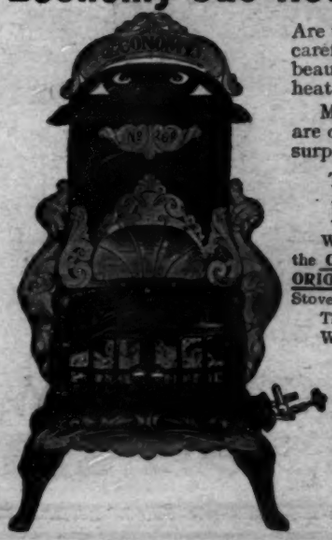
THE STANDARD

For High Grade Base Burners

EUGENE MUNSELL & CO., The Mica Headquarters

NEW YORK, 68 Church Street **CHICAGO, 358 Dearborn Street**

Economy Gas Heating Stoves and Ranges



Are the acknowledged leaders of the world. They are carefully made of the very highest class material, beautifully ornamented, and are quick and powerful heaters.

Material, workmanship, Style and Economy of fuel are only a few of the points where the *"Economy"* surpasses all others.

THEY DELIGHT CUSTOMERS AND ARE

BUSINESS GETTERS

Write for catalogue and prices, then secure the agency for the ORIGINAL ELEVATED OVEN Gas Range, as well as the ORIGINAL Circulating and Ventilating line of Gas Heating Stoves.

The largest line of closed front fuel stoves in the world.

We manufacture Gas Goods only and devote our entire time, energy and capital to doing it well.

Economy Stove Co., Cleveland, Ohio.

AGENCIES:

RICHARDS & CONOVER HDW. CO., Kansas City, Mo.
STEELE HDW. CO., Parsons, Kansas.
M. F. TALLMAGE, Buffalo, N. Y.

The MONITOR RADIATOR

BASE BURNER WITH FIVE FRONT FLUES

has *1683 Square Inches* more Radiating surface than any other Base Burner made.

THE BIGGEST SELLER ON THE MARKET

You should secure the Agency at once. *Write today to*

PAXTON & GALLAGHER CO., Omaha, Neb.

Exclusive Distributors for the West

THE CHAMPION

Hot Water Combination Boilers

THEY FIT ANY FURNACE

They fit close into the dome and have an open front at fire door. In small heaters base section can be used alone. One or more rings may be added for additional capacity to be determined by the amount of hot water radiation to be used. All joints absolutely tight.

WRITE FOR CATALOGUE.

FRANK D. STOLZ, Manufacturer

156 Webster Ave., CHICAGO, ILL.

The FUEL$AVER

Will Add $75 to $750 to Your Profits

¶ It's a new automatic heat regulator for furnaces. Keeps the temperature uniform. Reduces the coal bill 25%. Low in price and pays a big profit.

¶ Write for particulars today.

F. D. KEES MFG. CO., Beatrice, Nebr.

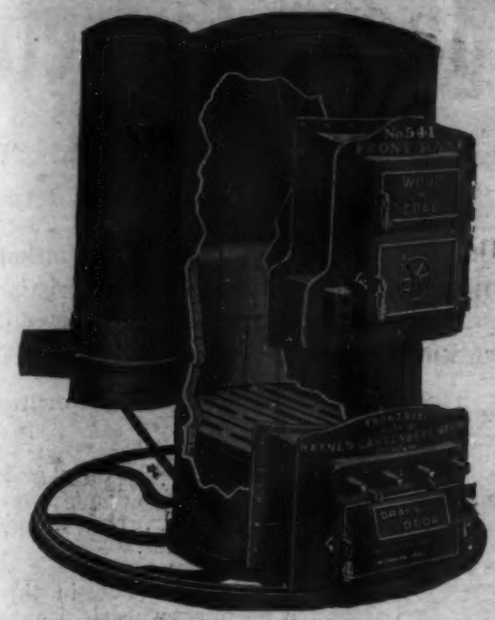
We are constantly adding to our list of customers for

Independent Stove Casters

simply because we make a **better** caster for **less money** than any other manufacturer.

Independent Register & Mfg. Co., Cleveland, O.

When The Votes Are Counted



it will be found

The People Rule

We have

Elected

to supply

The People's Choice

better than ever before, so have opened a Branch Salesroom and Stock at 211-213 Lake St., Chicago, where the trade of the West and Northwest can be better supplied with the **Best Steel Furnace** ever made.

Catalog and Printed Matter on Request

HAYNES-LANGENBERG MFG. CO.

4045-4057 Forest Park Boulevard :: :: ST. LOUIS, MO.
211-213 Lake Street, CHICAGO, ILL.

The Patented Square Pot and Square Grate

Used in all Boynton Square Pot Furnaces

There are two things to be considered in our Patented Square Pot Furnaces which should certainly appeal to you. One is that it is the latest and most important improvement in the manufacture of Warm Air Furnaces and the other is its easy saleability which means more money in it for you.

Remember we make the only furnaces that have square pots permitting free combustion and rapid clearance of ashes.

Write for Descriptive Circulars.

The BOYNTON FURNACE CO.

147-149 Lake St., Chicago **207-209 Water St., New York**

Magee Illustration No. 4

Magee Everett Furnace

The cheapest furnace on the market, and yet it has the **MAGEE** characteristics, **quality of material and thoroughness of workmanship.**

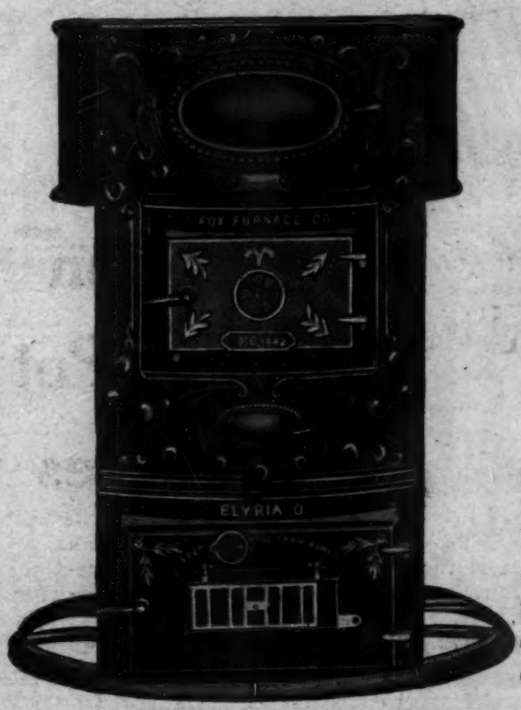
The design is simple, but nothing is omitted that tends to efficiency.

Ample ash pit—the **only** grate, the Dock-Ash. Broad dome shaped combustion chamber, and a large revertible flue radiator.

This furnace is made in **three sizes,** and the prices will astonish you.

A word to furnace men:—If the **Magee** line is not represented in your city, don't waste a minute, **write now to**

MAGEE FURNACE CO., 86 East Lake Street, Chicago



1,500 Series Fox Furnaces

Do you like a furnace with a full front? **THE FOX FURNACE CO.,** make a front on all of their cast iron furnaces. It will pay you to investigate the furnaces we make. **FOX FURNACES** do good work. **FOX FURNACES** do not wear out. **FOX FURNACES** are economical in fuel. **THE FOX FURNACE** is the best that can be made by using good material and skilled labor.

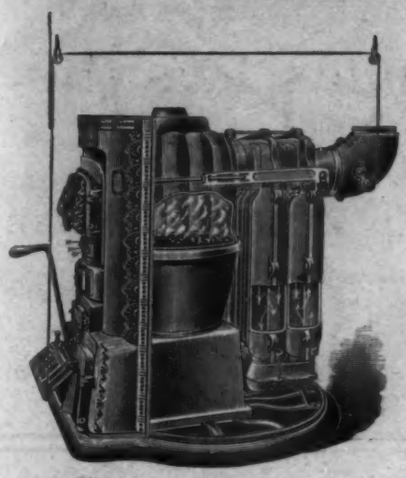
In making **FOX FURNACES** on every part that can be made by machinery a machine is used, all of which helps to make a better furnace for less money. The dealers do not have to wait for shipments as we have thousands of **FOX FURNACES** of all kinds in our warehouses and can ship the day an order is received.—That helps the dealer.

The Fox Furnace Co., Elyria, Ohio

Western Distributors: Day K. Smith & Co. Kansas City, Mo.
Michigan Agents: The Wormnest Stove & Range Co., Grand Rapids, Mich.

BENGAL

ALL CAST IRON FURNACE



Most Powerful and Compact Furnace Ever Produced

Burns perfectly Anthracite or Bituminous Coal or Coke. Has solid cast front and deep ash-pit.

EITHER DRAW-CENTRE, ANTI-CLINKER GRATE OR TRIPLEX GRATE which can be drawn out through ash-pit.

Adapted to all kinds of cellars as **they stand but 42 to 50½ inches high** from the floor to top of upper casing ring, allowing plenty of elevation for hot air pipes.

HAS MORE RADIATING SURFACE THAN ANY OTHER FURNACE OF THE SAME SIZE.

WRITE TODAY FOR COMPLETE DESCRIPTIVE MATTER.

THE FLOYD-WELLS CO. ROYERSFORD, PA. 83 Kinzie St., CHICAGO, ILL.

Clean and Tight Like a Boiler

We have erected a new factory in which we installed a 13 ton riveting machine, with which riveting is done by pressure rather than by hammering. This insures all the joints of

American Furnaces

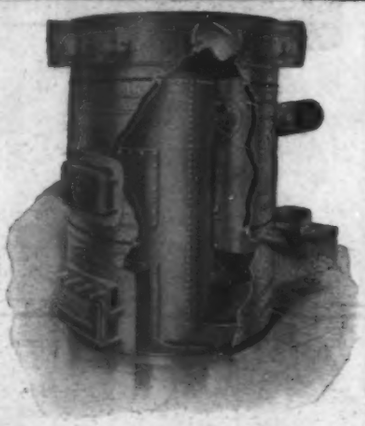
being absolutely tight.

DEALERS: A Sample Furnace will be shipped to any responsible dealer in the United States and if after careful examination (we allow you 30 days) it does not prove entirely satisfactory, it can be returned at our expense.

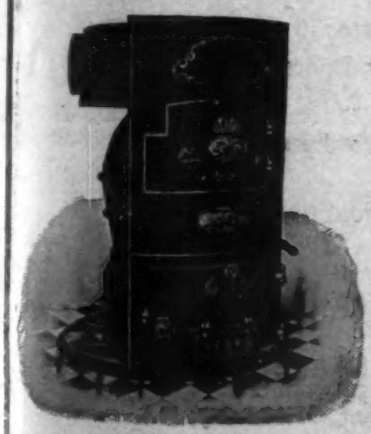
If you are looking for something better, do not fail to investigate.

THE AMERICAN FURNACE CO.

1911-15 Pine Street, ST. LOUIS, MO



CUT SHOWING DOUBLE CASING.



OUR NEW DE HAVEN ALL CAST FURNACE

Strictly Modern and Up-to-Date in Every Respect

All the latest features in modern furnace construction are embodied in the make-up of this furnace.

FEATURES: Extra Heavy; Gas Tight; Burns all grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Roller Bar Grate.

Write to-day for Catalog and Prices.

Youngstown Furnace & Supply Company

NILES, OHIO

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces.

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributers

Forbes Furnace—Height Over All 4 feet 3 inches.

Forbes Furnace

Low Down Type

WITH 1908 ADDITIONS

Produces Results

All Cast Iron—Absolutely Gas Tight
Burns Either Hard or Soft Coal

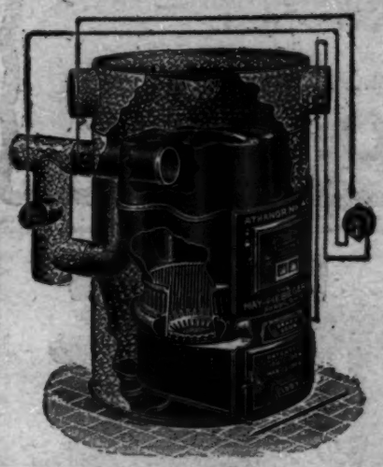
IT SHOULD LEAD YOUR LINE

Our Liberal Agency Proposition

Will interest you, write for particulars.

Tubular Heating & Ventilating Co.
228 Quarry St., Philadelphia

The ATH-A-NOR FURNACE



Is All that Its Name Implies.

ALWAYS A CLEAN FIRE AGAINST A CLEAN FIRE POT

The Fire-pot, which is smaller at the top than at the bottom, which renders it self cleaning, allows the oxygen of the air to aid in Securing Results in Economy of Fuel and Thorough Heating not secured in other Furnaces. That is one feature. There are many others, for instance: It burns Coal Nature's way—from the outside towards the center. It is easy to manage. Requires Less Shakingdown and Gives a Greater Volume of Heat than other Furnaces.

No Furnace Made Has More Talking Points, and No Furnace Made Will Sell Easier.

We Have A Catalog Containing Full Description. Write For It.

THE MAY-FIEBEGER CO., Akron, Ohio

The Hero Furnace

For any kind of Fuel

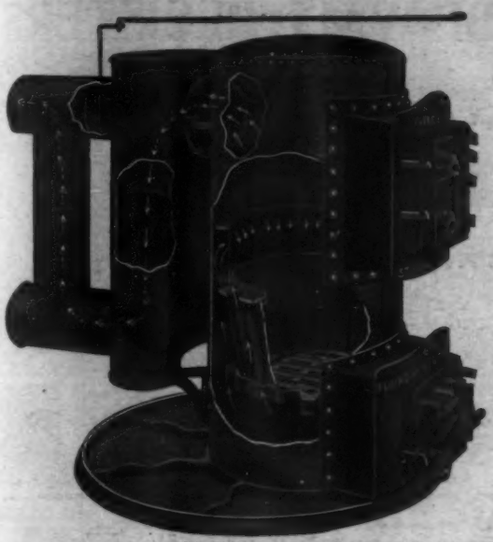
Showing Smith's Cleanable Water Heater

Cast or Steel Radiator.
Large Double Feed Doors.
Independent Grate Bars.
Everything an up-to-date furnace should have.
Catalog tells all about it, also about our

New Hero Boilers

CHAS. SMITH COMPANY
101 East Lake Street, CHICAGO, ILL.

Your Customer for a Furnace



will ask you about the advantageous features of the furnace you are trying to sell him. He wants the best. Will you be able to point out as many good features on your furnace as you would if you were handling

Green's Base Heater Furnace?

It is made of one piece of steel from top to bottom. The heads in the body and radiator are riveted in with a 20-ton press, the rivet is crushed and forms an absolutely tight seam. Built just like a boiler. A seam which will not allow steam to escape will be proof against gas and smoke.

It is provided with a slotted fire pot which admits the heated air to the combustion chamber and burns the gas and smoke. It removes the dirt and reduces coal bills.

The ashes can not accumulate behind the bowl, the air constantly passes over it both inside and outside and consequently it will not burn out as cast iron linings do.

IT HAS An unusually large radiator; A direct draft for starting fires quickly; Double feed doors; Hollow grate bars, each of which operates independently of the others; Water coil pocket.

Don't you want to sell a high grade furnace which can be purchased at a reasonable price?

Write for Our New Catalogue

Green Foundry & Furnace Works

Lincoln Stove Repair Co., Lincoln, Neb., State Mgrs. for Nebraska
Rowe Const. & Heating Co., Watertown, S. D., State Mgrs. for S. Dakota

Dept. "A" Des Moines, Iowa

Liquid Stove Polish

A-B

Liquid Fireproof Stove Polish

For Perfect, Easy Work

THE BEST made.

Brilliant, Lasting, and Durable.

A-B

POLISHES are in universal use.
And always give Satisfaction
Manufactured By

A-B **Polish Co.**

8-14 Haddon Ave.
CHICAGO

Simplicity, Durability, Economy and Capacity

All of which are essentials of the Really Good Furnace are featured in the

MONCRIEF

TOP RETURN FLUE WARM AIR FURNACE

In the MONCRIEF Furnace special attention has been paid to the little details, and efforts in that direction have not been wasted as they have assisted materially in making this a furnace which is unsurpassed for operation and durability.

FEATURES: Burns all grades of hard and soft coal; all cast iron; Moncrief Duplex Grate; large radiating surface; double fire-pot; large grate surface and cleanliness in use.

Write for Catalogue.

HENRY & SCHEIBLE CO.
825-29 Long Ave., N. W., Cleveland, Ohio
J. C. KIMMEL, 3314 E. 15th Street, Kansas City, Mo., Western Sales Agent.

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber

Nickel Plate Stove Polish Co.

CHICAGO.

Large 10 oz. Can.

J. K. SCHICK, Fairbury, Ill., writes:

"Your paper has furnished me with more than ten times the value of its cost."

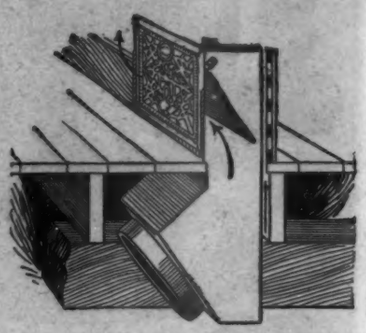
ILLUSTRATED CATALOG FREE WRITE FOR IT

GILT EDGE WARM AIR AND COMBINATION HEATERS LEAD. SCHWAB SIDE WALL REGISTERS ARE BUILT BETTER THAN OTHER MAKES.

SELL THE GILT EDGE FURNACES and SCHWAB SIDE WALL REGISTERS

From the first design to the finished product our goods are made in our own factory and under our own supervision. They are without competition in quality and construction. Over thirty years of experience have proved that the principles of construction are correct.

Our Complete Facilities Are at Your Service



We welcome your careful investigation of our products.

R. J. SCHWAB & SONS CO., Milwaukee, Wis.

GILT EDGE FURNACES FOR ALL FUELS. SCHWAB PIPE AND FITTINGS DO FIT—USE THEM—PRICE RIGHT TOO.

BOOKLET MODERN METHODS FREE WRITE FOR IT

ALL THE BEST FEATURES

—in—

Furnace Making have been embodied in our

All Cast Iron Furnaces

CAST IRON FURNACE

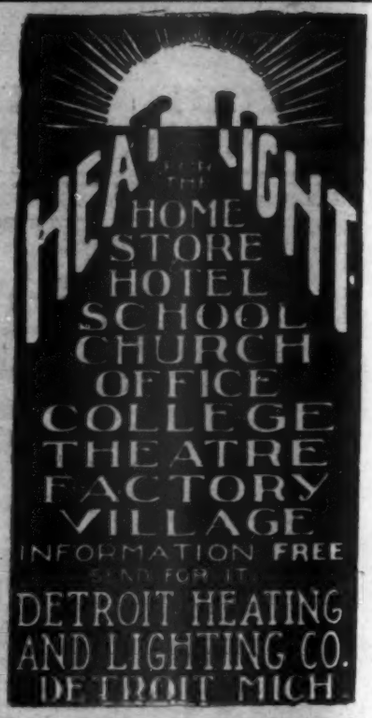
Absolutely Gas, Smoke and Dust Proof.

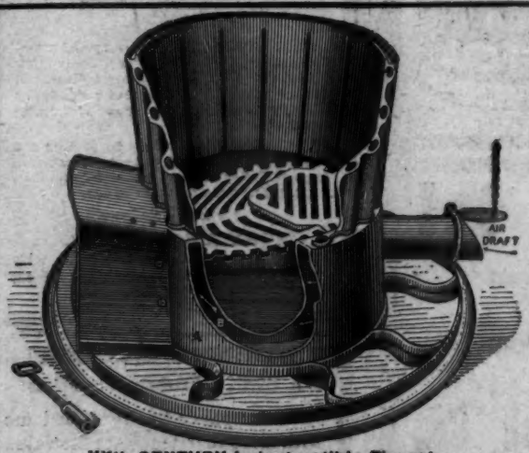
Simple, Durable and Powerful.

Water Heater may be introduced without drilling.

Write for printed matter of our complete line.

Walter S. Rait & Co.
211-213 Lake Street
Chicago, Ill.





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A Burning Question

Is one that concerns every user of a heater. Therefore the economy in fuel that is saved in the XXth CENTURY construction is an important item. Dealers recognize this fact, which accounts for our steadily increasing sales from year to year.

Write now for Agency in your territory.
The name XXth CENTURY is synonymous with QUALITY.
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The XXth Century H. & V. Co., Akron, O.

MANUFACTURERS OF
Water Tube Sectional Boilers, Radiators and Supplies, Warm Air Furnaces, Registers, Casing Rings & Fittings

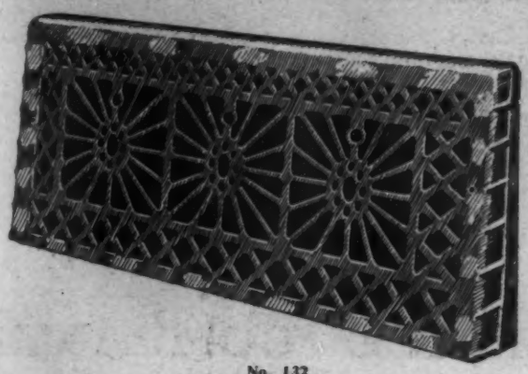
The Jones Side-Wall Registers

Are used in connection with

THE JONES SYSTEM OF HEATING

by more than **6000** of the leading furnace dealers in the United States and Canada.

THE NEW JONES SIDEWALL COLD AIR FACE



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Dimensions 14 in. high by 32 in. long. Air opening 288 square inches.
LIST PRICE
Black Japan **$7.00**; Electro plated, Ox. Copper, Brass or Nickel..**$11.00**
No. 115. Dimensions 14 in. high by 16 in. long. Air opening 154 sq. inches.
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Black Japan **$3.00**; Electro plated, Ox. Copper, Brass or Nickel...**$4.50**
No. 114½ is the same design as No. 115. Dimensions 14 in. high by 11½ in. long. Air opening 113 square inches.
LIST PRICE
Black Japan **$2.75**; Electro plated, Ox. Copper or Nickel.....**$4.00**

No. 15 JONES REGISTER
For first floor rooms. Bottom Collar, 7x13½
These registers are fitted with a top collar which fits 3½x12 Wall pipe, where two rooms, one above the other are to be heated or a plate when used for heating one room on the first floor.

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No. 113 same design as No. 114. Dimensions 13½ in. high by 14 in. long. Air opening 80 square inches.
LIST PRICE
Black Japan **$2.50**; Electro plated, Ox. Copper, Brass or Nickel...**$3.50**

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THE UNITED STATES REGISTER CO., Ltd., BATTLE CREEK, MICH.

OR TO BRANCHES: THE UNITED STATES REGISTER CO., Ltd., 104 Second St., North, Minneapolis, Minn.
THE UNITED STATES REGISTER CO., Ltd., 517 West 5th Street, Kansas City, Mo.
THE JONES REGISTER CO., 732 King Street West, Toronto, Ont.

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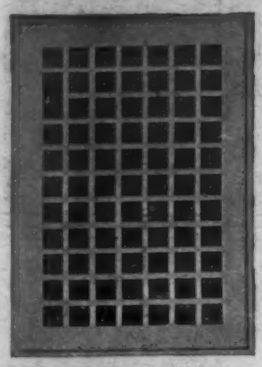

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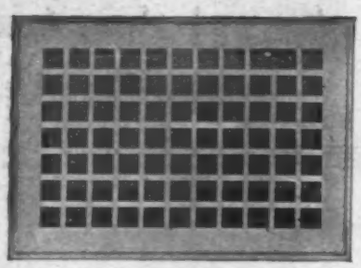
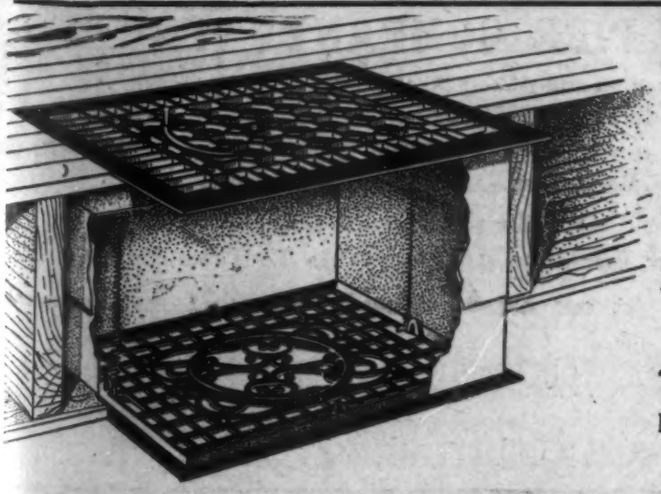
SIZES:
8x10, 8x12, 9x12, 10x12, 10x14



TUTTLE & BAILEY MANUFACTURING COMPANY

NEW YORK CHICAGO BOSTON BROOKLYN



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We have something better—

A Black Floor Register
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An Adjustable Sheet Metal Box Connecting the Two

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The Independent Adjustable Ventilator

INDEPENDENT REGISTER & MFG. CO.
CLEVELAND, OHIO

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Make Up Your Mind Now

to handle a furnace of which you can conscientiously say to your customer, "This Furnace is in a class of its own—no other heater made like it, and none that will compare with it in Power, Durability and Economy."

The MUELLER All Cast, Double Radiator Furnace permits dealers not only to make the above statement, but to back it up.

The MUELLER All Cast, Double Radiator Furnace contains MORE DIRECT HEATING SURFACE than any other heater—is constructed on practical and scientific principles, and above all DOES WHAT WE CLAIM FOR IT.

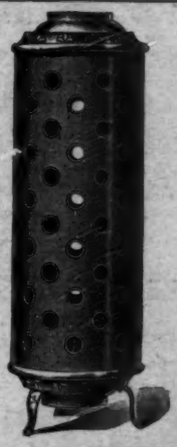
We make other styles, in fact the most complete line of Styles and sizes, for all kinds of fuel.

Would you like the agency? If so, it is up to you to write for it.

L. J. MUELLER FURNACE COMPANY

ESTABLISHED 1857

191 REED STREET MILWAUKEE, WIS.



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BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed, or money refunded Over 100,000 of them in use. Fits any stove or furnace.

We make the original and genuine Rochester Radiator.
We do not sell to Catalog Houses.

Price, from **$2.00** to **$12.00**
FOR HARD OR SOFT COAL, WOOD OR GAS.

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We guarantee our Radiators not to interfere with or choke the draught.
They are easily cleaned.
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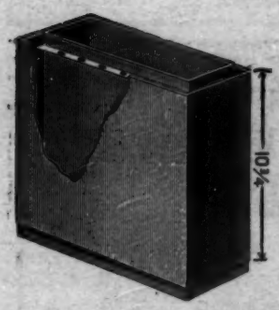

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Corner Brooklyn and Abbott Streets
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Manufacturers of Safety Wall Pipe, Single Pipe and Fittings in Both Tin and Galvanized Iron.

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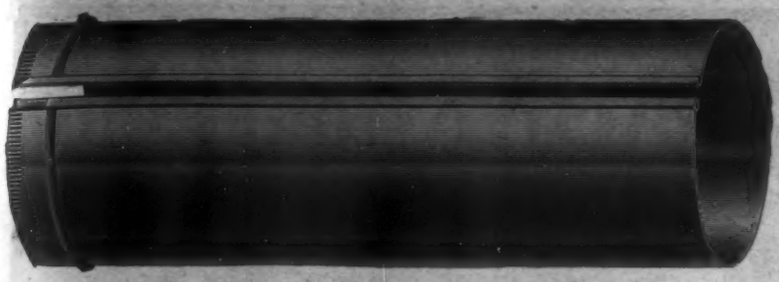
We Want Your Business And Are Able To Take Care Of It.

We belong to no combination. Do not get our name confused with other manufacturers.



The Pipe Before It Is Locked

The Pipe After It Is Locked

50 Feet of Pipe Nested for Shipment

Something New Under The Sun

NESTED HOT-AIR PIPE

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Great Saving Effected:

IN SPACE (occupies 1-25th that of ordinary Pipe).

IN WEIGHT (no huge, heavy crates needed).

IN FREIGHT (†ships as 4th class in less than carlots; 5th class in carlots).

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IN CARTAGE (requires little room and is easy to handle).

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The EXCELSIOR Steel Furnace Co.

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Also, FURNACES, REGISTERS, STOVE PIPE AND ELBOWS.

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Like all Floral City Furnaces, the CAPITOL has embodied in its construction all the best features of the up-to-date furnace. The result is a durable, powerful and economical heater. It's most important feature is the Dome or Body with the outer return flue, or

HORSE-SHOE RADIATOR

The Dome is high enough to give an extra large combustion chamber but the furnace is low enough to fit in shallow basements.

This furnace is heavily constructed and will give the most satisfactory service.

WRITE FOR CATALOG OF OUR ENTIRE LINE.

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Variety—Quality—Efficiency

168 Sizes Floor Registers in five designs Vertical Wheel.
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6 Sizes Reversible Wafers in two designs.
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135 Sizes Wall Frames 2" and 4".

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Every known special and Stock Finish. Write for our Catalog and discounts.

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The Very Best Medium Priced Steel Range on the Market

Nothing that is new in range construction has been omitted from the **Active Gold Coin.** The design is most pleasing. The nickel is of a semi-smooth class, carved just enough to take away the severe effect of our Colonial. The body is made of cold rolled polished plate steel. All points exposed to the heat being protected by asbestos. Full sized oven. Perfectly balanced oven door. Ample sized ash pit. Fire box fitted with duplex grate. This range offers a splendid opportunity to progressive dealers.

REMEMBER—It sells for a medium price and cannot be bettered for the money.

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There is always a demand for first-class base burners at a moderate price.

Here's a stove any dealer and every dealer can sell in any community.

The design is beautiful and original. It is handsomely proportioned, highly finished and fully nickled.

Every size is a double heater. The fire pot is large, heavy and solid. It is fitted with Duplex Grates, Automatic Magazine Cover, Tea Kettle Attachment, etc. Massive in appearance and good weight.

This Range and Base Burner are both sellers, up to the minute in every respect and are unequalled at the price.

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Blue Island Ave. and 22d St. - CHICAGO

ESTABLISHED 1880.

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Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, OCTOBER 17, 1908.

THE Bureau of Manufactures, Washington, D. C., is in receipt of a communication from an Egyptian business man stating that he desires to correspond with American manufacturers of cooking oil stoves, also patented novelties, as there is a large outlet for such articles in that region. By writing the bureau and referring to File No. 2705, the address may be obtained.

THE production of pig iron for September shows a remarkable increase over that of any other month of the year. If the gain in production continues at the ratio it has been increasing since last June, the output next May will be the greatest in the history of the country. The output for September was on a basis of 17,000,000 tons a year, an increase of 5,000,000 tons a year over the output of last January.

IT IS estimated that the value of the output of the mines of this country for this year will be $650,000,000. In the last five years these products have aggregated $3,296,000,000. In the copper industry alone it is estimated that the production in the United States, Mexico, and Canada for the month of September was the highest since the month of August, 1906, and was within a few million pounds of the largest month's output on record.

AMONG the numerous labor unions all over the United States affiliated with the American Federation of Labor there occurred 1,433 strikes during the year from October 1, 1906, to and including September 30, 1907. The annual report of the secretary of the Federation covering that period states that 1,071 of these strikes were won by the strikers, 105 were compromised, 124 were lost and 66 were still pending at the close of the year. What became of the other 67 strikes is not stated. The aggregate of the direct cost of all these 1,433 strikes to the unions ordering them and participating in them was the huge sum of $3,090,359.

A BIG increase in traffic is indicated by the American Railway Association's latest bulletin of car surpluses and shortages, the railroad barometer of business conditions. The report shows a decrease of 39,795 in the number of surplus cars on the railroads of the United States and Canada, the total surplus now being 133,792. During the past two months the decrease in idle cars has amounted to about 175,000. On May 1, when the greatest surplus in the history of American railroads was reported, the total was 413,605. Just before the effects of the panic began to be felt by the railroads a year ago there was a shortage of 90,000 cars.

THE United States produced 60 per cent more coal than Great Britain in 1907, over 100 per cent more than Germany, and, exclusive of Great Britain, more than all other countries combined. The Geological Survey, in a report on October 4 on the world's production of coal, estimates such production at 1,209,184,109 short tons, of which the United States furnishes almost 40 per cent. More than 93 per cent of the total world's production is from countries north of the equator, the countries south producing less than 20,000,000 tons annually. During the last forty years the percentage of the world's total produced by the United States has increased from 14.32 to 39.73, and since 1899 this country has held first place, having distanced Great Britain so far that that country can no longer be considered a rival.

THE production of gold and silver by the mines of the United States for 1907 aggregated 4,374,827 ounces of fine gold, of the value of $90,435,700, and 56,514,700 ounces of fine silver, of the commercial value, averaging 66 cents per ounce, of $37,299,700. As compared with the output of 1906, a decrease is shown in the value of gold of $3,938,100. While the production of silver in 1907 was only 3,200 ounces less than for 1906, the commercial value, on account of the decline in the price of silver, was $958,700 less. Colorado leads in the production of both gold and silver, having furnished $20,897,000 of the former and $7,587,000 of the latter metal. Alaska produced $18,489,400 in gold, followed by California, with $16,858,500; Nevada, $15,411,000; Utah, $5,121,600; South Dakota, $4,138,200; Montana, $3,472,600; Arizona, $2,664,000; Idaho, $1,255,900, and Oregon, $1,222,200. Next to Colorado in the production of silver was Montana, with $7,345,500; Utah, $7,528,500; Nevada, $5,465,100; Idaho, $5,206,300; Arizona, $1,916,000, and California, $1,049,400.

Central Stove Men Change Discounts.

AT THE September meeting of the Central Association of Stove Manufacturers, which covers Western Pennsylvania, Ohio, Indiana north of Vincennes, and West Virginia, it was unanimously decided to change the cash discount on coal and wood stoves to 2 per cent for cash within thirty days, the change to become effective January 1, 1909. This news does not

come as a surprise for the change has been expected for some time. It is a well-known fact that stove manufacturers are obliged to purchase practically everything they use on a cash basis. Their labor, iron, coal, coke, sand, etc., are subject to no cash discount. Only on a few minor supplies do they get any discount, and that not exceeding 2 per cent for cash in ten days. For a number of years the natural cash discount on coal and wood stoves, which is 2 per cent, has prevailed in the East, the discount being universal on gas stoves.

The action of the Central Association of Stove Manufacturers does not savor of anything arbitrary. It is simply the result of the demands made upon them by dealers in raw material, many of whom do not favor the policy of granting discounts even on the shortest time cash basis. It is thus apparent that no other alternative was left open to the stove manufacturers, and their action therefore cannot be considered unjust. The change is simply a fair and necessary readjustment to the present prevailing business customs, and still leaving a very liberal premium over the 6 per cent per annum cost of a bank loan for cash buyers.

Building Conditions Improving.

BUILDING for September shows that this country has not only recovered from the financial flurry of a year ago but that there is also a considerable improvement. According to official reports permits were taken out in 47 cities for the construction of 14,992 buildings, involving $45,364,944 against 12,930 buildings involving $41,088,084 for the corresponding month a year ago, a gain of 2,062 buildings and $4,276,860, or 10 per cent. This indicates that the improvement has been constant and leads to the belief that building will continue active from now on. In August the majority of the 47 cities upon which the report was based, showed a falling off. The conditions for September, however, are reversed, 29 cities showing increases and 15 a loss.

The showing is remarkable, not only because of the large number of cities in which there is a gain over the figures of a year ago, but because of the remarkably high percentage of increase. Cities in which ordinarily it would be thought that if building were upon a par with that of a year ago they would be doing well, have a percentage of increase which is so great that it should create much enthusiasm in respect to the future.

New York City has an increase of 25 per cent, but the most noteworthy increase was in Paterson, N. J., of 201 per cent; Washington followed with 191; Birmingham, 138; Denver, 113; St. Paul, 86; Pueblo, 72; Atlanta, 70; Tacoma, 75; Milwaukee, 57; Cleveland, 52; Salt Lake City, 51; Kansas City, 47; Lincoln, 42; Worcester, 39; Louisville, 38; Brooklyn, 27; Mobile, 23; Spokane, 19; Omaha, 19.

The cities showing a decrease are at widely separated points. They include Chicago, which while it has an increase in the number of buildings, shows a decrease in cost equivalent to 6 per cent in the amount involved. In St. Louis there was a decrease of 24 per cent; Philadelphia, 18; Los Angeles, 23; Buffalo, 6; Baltimore, 40; Cincinnati, 22; Columbus, O., 9; Duluth, 4; Toledo, 36; Dallas, 9; San Antonio, 33; Grand Rapids, 44; Terre Haute, 6; and St. Joseph, 40. Brooklyn, like New York, is rapidly recovering from inactivity and has for the first time in months a gain, the increase for September being 27 per cent.

The most impressive feature of the recent report is the remarkable building activity evidenced in cities of a certain class, many of which are surpassing in point of activity and growth older cities of twice the population. A good illustration of this is to be found in such cities as Indianapolis and Rochester, which are forging to the front at a remarkable rate, operations in each of these cities being on the basis of over half a million dollars a month.

Building operations is an excellent barometer of business conditions, and it is from such a report as the foregoing that one is able to get a good idea of the progress that the country is making not only in the building industry but in other industrial lines as well. A year has passed since the panic month of 1907. Business throughout the country is almost as good as it was in the summer of last year, and there is no doubt that later on it will go above that high-water mark.

Coal Prices on Heat Unit Basis.

MARKETING of Pittsburg coal may be revolutionized if the plans now being perfected are carried into operation. Instead of basing the price on weight it is proposed to base it upon the actual heat units the coal will produce. The change is based on chemical analysis with the British thermal heat unit as the basis. It is a well-determined fact that there is no guarantee for coal other than that determined by the heat units it will produce. A ton of 2,000 pounds may contain so much foreign matter that its usefulness for heat production is materially decreased when compared with a ton the heat units of which are far above it. Different cars of coal from the same mine may vary in efficiency as a producer of heat, but as a general proposition the coal from a given mine may be depended upon to make practically the same showing. This, however, is not true of different fields. The coal which lies between the Youghiogheny and Monongahela rivers is regarded as the best coal in the Pittsburg district, while that extending to the west of Pittsburg does not possess the same heat-producing qualities.

Analysis of river coal, as it is shown by the Carnegie Tech, shows 14,000 to 14,700 British thermal units, which gives it a commanding place in the market when contracts are based on actual value rather than upon the general knowledge that Pittsburg coal is good coal. There have been mines in the district mentioned where the British thermal units show 15,000, but this is not general, and, therefore, is not taken as a basis. For the sake of convenience Pittsburg operators are using 13,000 as a base and figuring up or down from that, because at that point the value of coal is $2 when coal is selling at $2. If the system of basing the price of Pittsburg coal upon the actual heat units the coal will produce instead of on weight, is carried into effect, it is believed that coal from that district will take precedence over the coal of Ohio, Indiana and Illinois, and will command a price commensurate with its excellence.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Be courteous. This should be the motto of every individual, whether young or old, rich or poor. Courtesy, apart from being an amiable attribute, is essentially necessary in these days. People demand courtesy. They will insist upon it. If they fail to find it in one place they will search until they do find it. In no phase of life is courtesy more necessary than in business. The great business corporations of today realize this, for they are constantly preaching courtesy and the "Golden Rule" to their employes. My attention has been directed to a circular which the Lackawanna Railroad recently addressed to its employes on the subject of courtesy. It subsequently incorporated it with its standard time-table folder. It attracted immediate attention outside of the railroad, and the heads of many large corporations, including four transportation companies and one of the large telegraph companies, reproduced it word for word and sent it to all their agencies. The circular is such an excellent one that I cannot refrain from reproducing it. Here it is:

CONCERNING COURTESY.

The following expression to its Agents, Conductors and other Representatives indicates the attitude of the Lackawanna Railroad Company on a subject of vital interest to its patrons:

The possession in marked degree of any worthy faculty should always be an incentive to develop that faculty. This company considers that its Agents, Conductors and other representatives possess above the average the faculty of being courteous to the public. To those who cultivate and exercise this faculty the company extends its congratulations and its thanks; to those who may not have fully appreciated its importance, thoughtful consideration of the following is suggested:

First. The principle that underlies courteous treatment of others is simply that of doing unto others as you would they should do unto you.

Second. In a highly complex and technical business such as that of a railroad there are many things that you, with your training and daily experience, understand with perfect familiarity, but which the public do not understand; therefore, do not assume that the public should comprehend them without asking questions, but when they make inquiry of you give them the courtesy of a reply just as full and clear as you can make it, and without any suggestion of superiority born of a greater knowledge.

Third. Words are only *one* means of expression and *manner* is quite as important; therefore, remember that a kindly and gracious manner is not only the sign and mark of a self-respecting man, but is to your words what oil is to machinery in making them move effectively to their purposes.

Fourth. True courtesy is no respecter of persons. It remembers that "a man's a man for a' that," and gives the civil word and the helping hand quite as readily to the ill-clad stranger as to an official of the company.

Fifth. Courtesy is not only something the public have a right to expect of you, but it *pays*.

It pays in the friends it makes you personally and as a representative of the company.

It pays in minimizing the friction of your life, as well as that between the company and its patrons.

It pays in raising your standing with the company.

It pays in the personal satisfaction resulting from having done the right and kindly thing by your neighbor.

It is the wish of the management of this company that all its representatives whose work brings them into contact with the public may appreciate and fully measure up to their duty and privilege in this respect.

C. F. Engstrom of Jersey City, coin collector and antiquarian, has obtained one of the four largest coins in the world. The giant piece of money was minted in 1659, and bears the imprint of Charles X. of Sweden. It is of bronze, oblong, twenty inches long by thirteen inches wide, and weighs thirty-one pounds. It is stamped in the middle and at the four corners, with the royal stamp of King Charles, but otherwise is as plain as a slab of slate. On its face the coin is worth eight Swedish thalers at the rate of exchange in 1659. As an antique it is said to be worth $500. In the year 1659 money was not in free circulation in Sweden. The ordinary citizen used to pay most of his bills in farm produce and labor, and those who had money used to keep it in their cellars in large slices. Enterprising burglars were unable to do a thriving business at the time. The average man's money was safe from all but professional strong men. In 1661 Sweden was at war with Russia. The Russians scuttled a Swedish man-of-war in Riga harbor. In 1901 Riga harbor was dredged by the Russian government and the ship raised. The four big bronze coins were aboard. Two are still in Russia, one is in England, and the fourth came to Mr. Engstrom. I have not heard what Mr. Engstrom proposes to do with his thirty-one pound coin, but there is no doubt whatever in my mind that he will have no difficulty purchasing his winter stove with it, if it is really worth $500.

* * *

To show how elastic the English language really is, the *Chicago Daily News* recently published the following. Truly the English language is about the limit:

ENGLISH LANGUAGE.

We'll begin with a box, and the plural is boxes,
But the plural of ox should be oxen, not oxes,
Then one fowl is a goose, but two are called geese,
Yet the plural of moose should never be meese.
You may find a lone mouse or a whole nest of mice,
But the plural of house is houses, not hice.
If the plural of man is always called men,
Why shouldn't the plural of pan be called pen?
The cow in the plural may be cows or kine,
But a cow if repeated is never called kine,
And the plural of vow is vows, never vine.

If I speak of a foot and you show me your feet,
And I give you a boot would a pair be called beet?
If one is a tooth, and a whole set are teeth.
Why shouldn't the plural of booth be called beeth?
If the singular's this and the plural is these,
Should the plural of kiss ever be nicknamed keese?
Then one would be that and three would be those,
Yet hat in the plural would never be hose.
And the plural of cat is cats, not cose.

We speak of a brother and also of brethren,
But though we say mother, we never say methren,
Then the masculine pronouns are he, his and him,
But imagine the feminine she, shis and shim.
So the English, I think, you will all agree,
Is the queerest language you ever did see.

* * *

TO BE SURE.

"Uncle Hiram, is there any profit in raising chickens in the suburbs?"

"Of course there is, you lunkhead. Every chicken you raise makes some profit for you. It's the chickens you don't succeed in raising that you lose money on."

News Siftings

The Republic Stove Mfg. Co., Cleveland, O., will erect a two-story addition to its plant, 60x74 feet.

The King Stove & Range Co., of Sheffield, Ala., has recently completed a new foundry room of solid concrete construction.

Damage estimated at $20,000 was the result of a fire that on October 9 attacked a building in Detroit in which was the branch house of Rathbone, Sard & Co., stove manufacturers.

W. G. Henry of the Detroit Stove Works, and president of the National Association of Stove Manufacturers, is now located in Detroit, having taken his family from Chicago to that city.

The Cleveland Round Stove Mfg. Co. of Cleveland, O., has been organized with a capital stock of $10,000 by Ferdinand Ziganek, Albert Savas, Bernhard F. Eihler, Ferdinand Graus and Charles A. Hummel.

The Howler Mfg. Co. is a new concern capitalized at $50,000, which contemplates the erection of a large building at Montgomery, Ala., handling stoves, tools, etc. The officers of the company are: President, J. C. Virden; vice-president, R. L. Harmon; secretary and general manager, M. M. Freed.

The Toledo Stove & Range Co., Toledo, Ohio, has had the most prosperous October in their history. Their shipments for October exceed in volume all previous records. Some of their departments work until 9 o'clock at night in their efforts to fill orders, and Manager P. J. Taylor is much gratified at the outlook.

Recently a representative of THE AMERICAN ARTISAN, while in Erie, Pa., called at the plant of the American Beauty Stove Co., and was considerably surprised to find that it is now three times as large as it was a year ago, and that every square foot of the floor space is now needed. This does not look like an indication of business depression.

The Richmond Stove Co., of Richmond, Va., report that they are making good progress with their new building and that they are taking care of their orders with reasonable promptness. They say that their old plant, which was recently damaged by fire, has helped them out to such an extent that they have lost very few orders. They report that business for the past few months has been very satisfactory.

Gray & Dudley Hardware Co., Nashville, Tenn., are sending out a souvenir fob griddle, ten thousand of which they gave away at the recent meeting of the Tennessee State Fair in Nashville. The fob griddle was manufactured at the company's foundry, and the strap attached thereto in their harness factory, thus representing products of two of the Gray & Dudley Hardware Co.'s manufacturing plants.

Plans for building an addition to the plant of the Woods-Evertz Stove Co. at Springfield, Mo., have been completed whereby the capacity of the foundry will be doubled, 60 molders being employed instead of 30 as heretofore. That the business transacted by the company is good, was the statement recently made by W. W. Woods, president of the company, who stated that the present capacity of the plant is no longer sufficient to meet the orders that are coming in. The Woods-Evertz Stove Co. has a capital stock of $100,000.

The Monitor Stove & Range Co., Cincinnati, O., say that dealers throughout the country are finding their Monitor five-flue radiator to be an exceptionally good business producer, especially when placed on the sample floor of the store. This stove is provided with incased hot-air flues and a baffle plate between the fire-pot and the radiating flues. They guarantee the Monitor radiator to possess the maximum amount of radiating surface. When writing for literature and prices kindly mention THE AMERICAN ARTISAN.

Smith & Anthony Co., 52-54 Union street, Boston, are sending out a folder describing the "Hub" oak stove for wood or coal, the "Hub Junior" oak for coal, wood or coke, the "Hub" ebony finish wood parlor stove, the "Hub Star" air-tight stove for wood, and the "Boston and Maine" air-tight stoves. In another folder are described the "Crown Hub" with full base flues, the "Superb Hub" with revertible flue, the "Hub" heater with or without back pipe attachment, the "Art Hub" with revertible back pipe flue, and the "Ivy Hub" a direct draft heater. When writing Smith & Anthony Co., kindly mention THE AMERICAN ARTISAN.

The Independent Stove Co., formerly of Detroit, Mich., are now located in their new plant at Owosso, Mich., where in future all their business will be transacted. The company did not begin to dismantle their Detroit plant until Oct. 1, but in 8 days from that date they had loaded and shipped to Owosso 29 carloads of equipment and material, at the same time getting their Owosso plant in such shape that they began mounting stoves on Oct. 10, or ten days after they had started to dismantle their plant at Detroit. The company thinks that they have thus established a record for quick moving. They are now in a better position than ever to supply the trade with "Renown" stoves and ranges with the utmost promptness.

P. D. Beckwith Estate are making a great many extensive improvements to their plant at Dowagiac, Mich. They have just erected an enormous two-story brick structure used for the nickelplating, polishing and grinding departments. They have transformed the former Elks lodge hall in the Beckwith Memorial Building into a magnificent sample room. The room is handsomely decorated, and is very well adapted as a sample room, where they are showing the original Round Oak stove, Round Oak steel range, Round Oak furnace, and the new Round Oak base-burner. They are running full with two hundred and eighty molders and the complete force of eight hundred and forty men.

The Stove & Range Co. of Pittsburgh, Pittsburgh, Pa., are sending out a folder illustrating and describing their "Monarch Cinderella," "Brilliant Cinderella" and "Imperial Cinderella" base-burners, for hard coal. These base-burners are designated by the Stove & Range Co. of Pittsburgh as "the great five-flue line." The three stoves mentioned are provided with lift-out fire-pots, lift-off nickel and Ransom duplex grates.

They are said to be powerful circulators, and to be giving the greatest measure of satisfaction wherever used. The "Imperial Cinderella" is the lowest priced of all "Cinderella" base-burners, but in heating power and economy, size of fire-pots considered, it is said to be the equal of any in the line. When writing the Stove & Range Co. of Pittsburgh for prices kindly mention THE AMERICAN ARTISAN.

The Ward-Dickey Steel Co., Indiana Harbor, Ind., are calling the attention of the trade to their patent planished steel sheets, which are said to be unequaled in working qualities by any other planished goods made in the steel or iron line. It will take long and high heats in stoves, pipe, etc., and is guaranteed to hold its color. The company requests that these goods be not confused with the roll-finished imitations, "polished steel" sheets. Hammer planishing begins where roll finishing ends. The No. 27 Dickey planished sheet steel, which has the imported Russia iron finish, is made in regular sizes 28 and 30 inches by 60, 72 and 84 inches, in the various gauges constantly kept on hand by the Ward-Dickey Steel Co. Special sizes can be made to order. When writing for prices kindly mention THE AMERICAN ARTISAN.

The large creditors of the Glazier Stove Co., of Chelsea, Mich., principally Detroit banks, who bought in the plant at receiver's sale, organized on October 6 the Chelsea Stove & Manufacturing Co. to take over and operate the plant. The capitalization is $400,000. Directors were elected as follows: Alex. McPherson, President Old Detroit National bank; Emory W. Clark, Vice-President First National bank; Ralph L. Stone, Secretary Detroit Trust Co.; H. C. Potter, Vice-President People's State bank; Frank F. Tillotson, cashier Citizens' Savings bank; James A. Smith, Detroit manager of sales American Sheet & Tin Plate Co.; Archie W. Wilkinson of Chelsea, and W. W. Wedemeyer of Ann Arbor. The officers are: President, Alex. McPherson; Vice-President, Emory W. Clark; Secretary and Treasurer, Ralph L. Stone. H. L. Stanton of Lansing, and manager of the Glazier plant under the Detroit Trust receivership, remains as manager for the new company.

THE "ACTIVE GOLD COIN" STEEL RANGE.

A new steel range known as the "Active Gold Coin" has been put on the market by the Chicago Stove Works, 22d St. and Blue Island Ave., Chicago. It is said to embody all that is latest in the manufacture of ranges. It is very attractive in design, the nickel being of a semi-smooth class. The body is made of cold rolled polished plate steel. All parts that are exposed to the heat are protected by asbestos, the top of the plate being protected by an asbestos sheet covered with a steel sheet, making the top of three thicknesses. The oven of the "Active Gold Coin" is full size and made of heavy steel plate, thoroughly braced with cast-iron braces, preventing warping and buckling. The oven door is perfectly balanced, it is said, and when open it forms a large smooth shelf. The pouch feed door is of the Chicago Stove Works' well-known construction, which has proved so successful in the past. The reservoir casing is all cast iron and is guaranteed to be rust proof. The fire-box is adapted for burning all kinds of fuel, the linings being heavy and well ventilated. It is fitted with a duplex grate, which when reversed forms an excellent wood grate, all that is necessary to turn the range into a wood range being to remove the end fire-box lining and reverse the grate. The Chicago Stove Works says that this range is proving to be a ready seller. When writing for prices kindly mention THE AMERICAN ARTISAN.

THE NEW "CROWN PRINCESS" RANGE.

The Allen Mfg. Co., Nashville, Tenn., are calling the attention of the trade to their new "Crown Princess" steel range provided with a right-hand reservoir that is guaranteed to heat the water hot in 15 minutes without detracting from the baking of the oven. The reservoir holds 11 gallons and is copper tinned inside. It is very easily cleaned, all that is necessary being to remove the plug from the drain tube in the bottom. The Allen Mfg. Co. have applied for a patent on this range and they are confident that it will make a name for itself worthy of its substantial construction, pleasing design, general efficiency and utility. A circular descriptive of this new range may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

THE "ROYAL QUALITY" RANGE.

The Quality Stove & Range Co. of Belleville, Ill., say that their line of "Royal Quality" ranges are achieving a marked degree of popularity. The "Royal Quality" range is made with either cabinet or cast leg base. The ovens in the various sizes of this range measure 16x18, 18x18 and 20x18 inches. The manufacturers assert that this range is as absolutely free from any defects as it is possible to make it. The flue backs are made of cast iron, securely bolted to the range making them, it is said, practically air-tight. The oven top is arched, and the covers and centers are arched and ribbed in a manner that is said to prevent them from warping or cracking. This range is provided with a heavy duplex grate for coal or wood which may be removed or replaced independently of other parts of the fire-box. When writing the Quality Stove & Range Co. for further particulars concerning the "Royal Quality" range kindly mention THE AMERICAN ARTISAN.

OBITUARY.

Morris P. Carroll.

Morris P. Carroll, cashier of the George M. Clark Company, division of the American Stove Company, 82 Michigan Avenue, Chicago, died of heart failure on October 10, while on his way from his residence, 297 Belden Avenue, to his office. Mr. Carroll, who was 66 years of age, was born in Baltimore, and had been associated with the George M. Clark Company some sixteen years. He left a widow and one daughter.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 45 inclusive.

The plant and property of the Putnam Nail Co., of Boston, Mass., has been sold to the Magnesia Co., of New York.

The plant of the Eagle Lock Co., at Terryville, Conn., has resumed operations on full time. It employs about 600 men.

The Bauer Gas Burner & Heater Mfg. Co. of Kansas City, Mo., has been incorporated with a capital stock of $3,000 by August F. Bauer, John Tarpey and Percy A. Budd.

The Salem Nail Co. is a new New York concern recently incorporated with a capital stock of $100,000 by W. H. Smith and others. This concern is not connected in any way with the New Jersey corporation of the same name which was recently placed in the hands of a receiver.

Henry W. Cortes, president of the Bering-Cortes Hardware Co., of Houston, Tex., was killed on October 4 in a runaway accident. Mr. Cortes, who was 52 years old, was a native of Galveston, but went to Houston in 1855, where he became a member of the firm of Bering & Cortes, the concern having been incorporated under its present title in 1901.

The Michigan Show Case Co., state that their Wolverine show case is proving a ready seller among hardware dealers. It is built of solid oak throughout, with beveled plate glass top, nickeled fittings and brackets. It is said to give perfect display to the articles in it. When writing the Michigan Show Case Co., Dept. C, 51-53 East Fort St., Detroit, Mich., for new catalogue, kindly mention THE AMERICAN ARTISAN.

The Wright Wrench Co. of Akron, O., and formerly of Philadelphia, Pa., will probably have their plant at Akron in operation by November. All the machinery has about been installed, and the new plant will, it is reported, have a capacity of 1,000 wrenches a day. The officers of the company are: President, Allen C. Mason; vice-president and general manager, J. F. Wright; secretary-treasurer, F. M. Harshberger.

The Manville Brothers Company, 27-33 Benedict street, Waterbury, Conn., have purchased from Frederick E. Cross, of the Cross & Spiers Machine Company, Waterbury, all of the drawings, patterns, etc., of the different lines of machinery and presses that they have been manufacturing. In the future the Manville Brothers Company will make these lines of work and Mr. Cross will be connected with them as a special representative.

North Bros. Mfg. Co., Philadelphia, report that there is a steadily increasing demand among hardware dealers for their celebrated "Yankee" tools, which are said to be without an equal in quality and efficiency. Their magazine ratchet screwdriver, their ratchet driver with screw holder, and their ratchet "screw eye" driver are among the most popular tools made by North Bros. Mfg. Co. A catalogue may be had for the asking. When writing for it kindly mention THE AMERICAN ARTISAN.

The United Fence Co., of Port Huron, Mich., will construct a manufacturing building 50x135 feet, a storage house for raw material 100x135 feet, and a warehouse 100x150 feet. New machinery will be installed and improved facilities for the manufacture of plain and barb wire, etc. The officers of the company are: President, M. D. Pendergast; Secretary-Treasurer, John A. McCrae.

"Business is gaining right along and the outlook is good," was the universal statement at the annual meeting of the New York State Hardware Jobbers' Association, held at Rochester, N. Y., on October 9. The following officers were elected for the ensuing year: Edgar C. Newell, Buffalo, president; R. H. Treman, Ithaca, vice-president; Joseph Born, Syracuse, secretary-treasurer; Irving D. Booth, Elmira, and James H. Boucher, Rochester, directors. Next year's meeting will be held at Troy.

The next annual convention of the Inland Empire Implement and Hardware Association will be held at Spokane, Wash., on January 20 and 21, 1909. The second annual convention of the Pacific Federation of Hardware and Implement Associations, embracing Montana, Idaho, Washington, Oregon and California, will be held in Spokane on January 22. The Inland Empire Implement and Hardware Association are planning to hold their first annual hardware, implement and vehicle show in connection with their convention. Secretary Evenson states that the association has secured the State armory, covering a block of ground, for this purpose, and that they are receiving many inquiries from firms who desire to have an exhibit at the show. The Oregon association will hold its annual convention either two days before or two days after that of the Inland Empire Association.

Members of the executive committee of the Texas Hardware Jobbers' Association met in Dallas on October 7 to consider a number of matters of importance to the organization. Most important was the demand made by the committee upon the manufacturers of wire goods in the Eastern manufacturing centers that all goods should be sold to the jobbers "f. o. b. New York." It is stated that this would mean the routing of the freight, of which a large amount goes every year to Texas points, so that from New York it would go by water to Galveston. The plan is said to be a movement to meet the increased freight tariffs of the railroads, believed by the hardware men to apply particularly heavy to Texas. It is said that the manufacturers are ready to accede to the demand. It is stated that if the railway rates are maintained the traffic in wire goods will go to Texas by water, and that a saving of from 10 to 15 cents per 100 pounds will be effected.

EN ROUTE TO MEMPHIS.

"Pop" (W. H.) Bennett, 105 Lake street, Chicago, chairman of the committee on transportation, is very busy making preparations for the entertainment of the guests en route to Memphis who will leave Chicago on a special Illinois Central train on Monday

evening, November 16, to attend the annual convention of the American Hardware Manufacturers' Association and the National Hardware Association, which will be held at Memphis on November 18-20. Headquarters for the members and their friends while in Chicago will be at the Auditorium Annex. Elaborate arrangements are being made for the entertainment of the party while in Chicago, and for a banquet which will be given on the train.

A THANKSGIVING WINDOW DISPLAY.

In THE AMERICAN ARTISAN'S recent hardware window display competition, honorable mention was made by the judges of the display made and the photograph submitted by the Phillip Gross Hardware Co., 126-128 Grand avenue, Milwaukee, Wis., under the nom-de-plume "Kumpf." As will be seen from the illustration the display was one in which the Phillip Gross Hardware Co. exhibited among other utensils cooking appliances, such as the Lisk roaster, especially serviceable in the cooking of the Thanksgiving dinner. The Phillip Gross Hardware Co. stated that the display made a very favorable impression and was productive of excellent results.

The window measured 6 x 20 feet. In the extreme background two posters were shown of a young woman holding a roaster. In front of these posters two base-burners and two steel ranges were placed, with an arch in the center in which the Lisk roaster was displayed. To the extreme left of the window there were placed on glass shelves copper and nickel coffee percolators and baking and chafing dishes. Next to these articles on a small stairway built of boxes and covered with white cheese cloth a line of silverware was arranged, together with knives and forks, game shears, carving sets and a copper chafing dish. In the center of the window a Lisk roaster was placed in which was a papier-mache turkey. To the right of the window, on a glass shelf, was displayed a line of pearl, celluloid and rubber handled table knives. In the foreground of the window sterling silverware, such as fancy spoons and other pieces were tastefully arranged, with carving sets and coffee percolators placed here and there. The entire floor of the window was covered with white cheese cloth giving it a very attractive appearance.

Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S Hardware Window Display Competition—Submitted by Phillip Gross Hardware Co., Milwaukee, Wis.

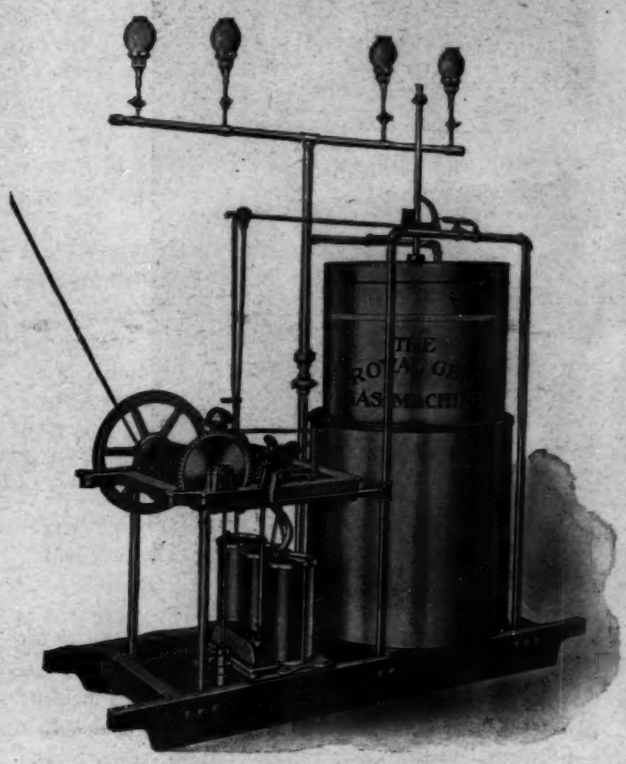
CATALOGUE OF W. B. HELLER & CO.

W. B. Heller & Co., Montpelier, O., have recently issued a catalogue of Heller's steel shelf boxes, cases, etc. It is a book of 44 pages, and in it are illustrated and described the complete line of standard hardware shelf boxes and assortments manufactured by the concern. W. B. Heller & Co.'s shelving is built of ⅞-inch dry lumber, 30 inches between uprights, 6 inches between shelves and 12 inches from front to back. In this shelving display cases can be built for saws, tools and miscellaneous goods, using glass doors, hinged or sliding, which will greatly improve the appearance of a hardware store. W. B. Heller & Co. state that many of the oldest hardware dealers in the country have adopted their "Simple System" as the most practical for displaying, selling and systematizing their stocks. Thousands of dealers, they say, are using Heller's steel shelf boxes with pleasure, profit and satisfaction. The fronts and backs of Heller's boxes are of wood, ¾-inch thick, the sides and bottom being pressed of one piece of cold rolled galvanized steel, the steel being embedded in the wooden ends by W. B. Heller & Co.'s own process, and secured by steel wire brads driven from the inside through both metal and wood, thus making a box of scientific construction and without any nails or rough edges on the outside. The top edges are double-turned in such a manner that

strengthens the edges and prevents buckling. There is a depression on the side near the front which is enameled, upon which the cost and selling prices of the contents of the box can be marked. In the catalogue are fully described Heller's standard base or counter drawers, pulls, card clips, sample holders, nail bin counters, glass, board and sundry cabinets, screw and bolt cases, sundry cases, Heller's dust and mice-proof bins, tool brackets, bar tool brackets, adjustable shelf brackets for tinware, paints, etc., noiseless steel store ladders, etc. When writing W. B. Heller & Co. kindly mention THE AMERICAN ARTISAN.

THE "ROYAL GEM" GAS MACHINE.

J. E. Whitacre Mfg. Co., Rockford, Ill., manufacturers of Improved one-piece miters and sheet metal specialties, have in course of preparation a booklet describing the "Royal Gem" gas machine, which they say they have been putting to the most trying tests during the past six months to satisfy



"Royal Gem" Gas Machine.

themselves that the machine is all they claim it to be, namely "the best gas producing system on the market." The machine, as shown in the accompanying illustration, is claimed to embody all the requirements of a gasoline gas generator, producing an even quality of gas. The quality or temper of the gas, regardless of the number of lights burning, can be absolutely controlled, it is said, by adjusting the stroke on the gasoline injector, which is very easily done. An important feature of a gas producer is the pressure the brilliancy of a gas light depending as much on the pressure as on the quality of the gas. The J. E. Whitacre Mfg. Co. says that results from tests prove that high pressure consumes 50 per cent less gas than a low pressure to get the same quality of light. With the "Royal Gem" gas machine they say they can produce any desired pressure, rendering it extremely economical.

The "Royal Gem" produces gas by actual measurement. A specified amount of air is delivered into the carburetor and gas holder; at the same time a specified quantity of gasoline is drawn from the storage tank and atomized into the air, thus instantaneously producing a certain quality. As the gasoline is entirely converted into gas there is no weakened gasoline to return to the storage tank. For this reason, it is said, the gas will be the same quality as long as the same quality is furnished the tank. The gas is filtered through what is claimed to be the most scientific carburetor manufactured, causing an instantaneous and perfectly dry and uniform mixture. The J. E. Whitacre Mfg. Co. states that in the construction of this machine they use nothing but the very best material, and of sufficient weight and strength to make it first-class in every respect. Each machine before being shipped is given a thorough test, such as running a 10-horsepower engine, soldering stoves, ranges, lights, etc. When writing the J. E. Whitacre Mfg. Co. kindly mention THE AMERICAN ARTISAN.

CATALOGUE OF THE PHILADELPHIA LAWN MOWER CO.

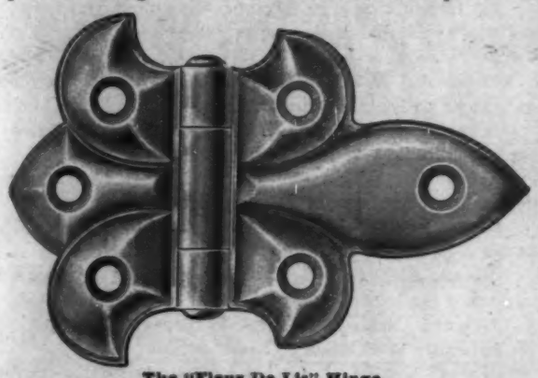
The Philadelphia Lawn Mower Co., 3101-3109 Chestnut St., Philadelphia, Pa., are sending out their fortieth annual catalogue for 1909. The book measures 10x6½ inches and contains 28 pages. The cover is handsomely embossed in gold, the illustrations of the various types of lawn mowers manufactured by the company being beautifully printed in a number of colors. It is rarely that a neater and more artistic catalogue has been brought to our attention. On the second page is a view of the company's plant, which they say is "the largest and most complete lawn mower works in America." In presenting this catalogue the company affirms without fear of contradiction that they have maintained the reputation of the genuine Philadelphia lawn mowers and kept abreast of the times as manufacturers. They call attention to the many styles of hand and horse mowers listed in the catalogue, some of which are adapted to any use and cannot fail to supply the demand. The company asserts that they manufacture the largest and most complete line of fine grade lawn mowers in the world.

No mowers made by The Philadelphia Lawn Mower Co. have a bar running through the center of the revolving cutter. Philadelphia lawn mowers have double riveted cylinder ends, large and long bearings and run very lightly. All mower knives are made of what is said to be the best crucible steel, oil-tempered so as to insure the finest cutting qualities, and if kept adjusted are self-sharpening. None of the bottom knives are riveted to the knife bar, but are fastened with screws and easily removed for duplicating parts. The company states that all their iron castings are made under test for tensile strength, and where malleable iron is required it is of the finest quality that can be produced. The wood handles and rollers of Philadelphia lawn mowers are made in the company's own factory from well-seasoned material and by specially constructed machinery. All wood roller pins

are made of steel and are screwed into the wood. The "T" connection to the wood handle is made under heavy pressure, forcing the "T" tight into the tenon of the handle and held in position by two glued wedges. The last work done on all Philadelphia lawn mowers after the parts are assembled, is running them at high speed to grind in the knives with emery and oil. Finished in this manner, the manufacturers say that they will cut fine paper, after which they are inspected and ready for painting, each mower being given two to three coats of paint. The various sizes and styles of mowers manufactured by the company are very fully described in the catalogue together with Philadelphia lawn sprinklers and lawn sweepers. When writing for the company's 1909 catalogue kindly mention THE AMERICAN ARTISAN.

"FLEUR DE LIS" SURFACE HINGE.

The accompanying illustration represents the "Fleur De Lis" surface hinge made by The Griffin Mfg. Co., 1500 Cherry St., Erie, Pa. This hinge is made in all finishes, and the manufacturers say that it has no superior for high-class work at a moderate price. The



The "Fleur De Lis" Hinge.

design here shown as well as other similar designs of The Griffin Mfg. Co. are protected by broad patents. The "Fleur De Lis" surface hinge is artistic in design and of substantial construction. The Griffin Mfg. Co. states that this hinge is meeting with the same success as the Griffin improved steel door hanger, Griffin butts, shelf brackets, door bolts, etc. When writing for catalogue kindly mention THE AMERICAN ARTISAN.

THE IMPROVED "PERFECTION" MIXING SPOON.

The accompanying illustration represents the Improved "Perfection" mixing spoon with wood handle, unlike other varieties of mixing spoons, in that two slotted spoons are attached to one handle, thus doing double the work performed by the old-style single spoon. For beating eggs, cream, pancakes, etc., it is said to have no equal. It is said to be equally as useful for mashing potatoes. It can also be used for lifting vegetables from the pot or eggs from the pan. For mixing or stirring fruits it is said to have no equal. These spoons are packed one dozen in a pasteboard box, twelve boxes to the crate, one gross weighing 40 pounds. When writing for prices and descriptive circular kindly mention THE AMERICAN ARTISAN.

"Perfection" Mixing Spoon, With Wood Handle.

made by Stuber & Kuck, Peoria, Ill., manufacturers of pieced tinware, cans and specialties. This spoon, which the company terms "the housewife's favorite mixer," is made of No. 18 steel plate, retinned. It is

NEW RAZOR STROP.

The Simmons Hardware Co. of St. Louis has put on the market a new razor strop which they call the "Pet" razor strop, No. 11. It is made of an extra good quality of leather, the sharpening side being made

The "Pet" Razor Strop, No. 11.

of genuine horse hide and the finishing side of high-grade calf skin. The chief feature of this strop is that the honing preparation is worked into the horse hide or sharpening side of the strop, so that little time is required to strop the razor to make it a "keen kutter." The Simmons Hardware Co. states that this strop is meeting with great success wherever introduced. When writing for prices, kindly mention THE AMERICAN ARTISAN.

CATALOGUE OF THE CALDWELL MFG. CO.

The latest catalogue of the Caldwell Mfg. Co., 41 Jones St., Rochester, N. Y., manufacturers of hardware specialties, is gotten up in very attractive form, and is an excellent specimen of the printer's art. In it the extensive line of hardware specialties made by the company, are very thoroughly described and very clearly illustrated. The goods listed in the catalogue include the "Caldwell" sash balance (both side and top balances); balances for car windows; marine window balances, made of bronze metal with polished face plates; show case balances, for drop doors in counter cases; the "Acme" aluminum bronze sash ribbon, an alloy of aluminum with other metals, producing in combination a soft, pliable and non-corrosive ribbon; "Acme" casement window fasteners, for binding the sash tightly against the casing; the "Acme" automatic basement window catch, which takes the place of hook and eye for holding cellar windows open; the "Acme"

basement window fastener, a lock which presses the sash tightly into the frame, and which prevents rattling and excludes cold air and snow when sashes are loosely fitted; "Acme" basement window sets, each box containing all the hardware for one basement window; the "Caldwell" vertical door holder, with only one screw visible; the "Empire" door holder, which is operated by a light pressure of the foot, and which is provided with a rubber tip and spring action, making it particularly desirable for use on carpet, polished wood or tiled floor; the "Acme" door-stop and car door-stop; the "Caldwell" door holder; the "Empire" side sash lock; the "Caldwell" window ventilator for changing or keeping pure the air of a room without creating a draft; the "Caldwell" and "Dime" screen door checks; the "Jumbo" nut cracker; the "Gem" nutmeg grater; trousers and skirt hangers; and the "Boucher" adjustable shaving glass, which may be fastened to the window casing and so adjusted as to catch a strong light upon either side of the face. The Caldwell Mfg. Co. will be pleased to forward their catalogue to those interested. When writing for it kindly mention THE AMERICAN ARTISAN.

CUSTOMS DECISION ON GUN LOCKS.

The Board of United States General Appraisers has upheld the action of the collector of customs at Chicago, in assessing additional duties on extra detachable locks accompanying importations of double-barreled breech-loading shotguns by Von Lengerke & Antoine, Chicago. The guns in question were assessed at $6 each, and in addition thereto 35 per cent under paragraph 158 of the tariff act, and the additional parts at 50 per cent, under the same paragraph, as "parts of such guns." The importers contended that the extra parts are interchangeable parts, and should have been classified with the gun as a unit or entirety. In reaching the conclusion that the extra parts are dutiable, General Appraiser Fischer says:

It is admitted that the extra detachable locks have been fitted and adjusted carefully to the particular gun which they accompany, and can only be used with that gun. That, however, will not prevent a separate classification of such extra parts. The breechloading guns as imported were complete and ready for use, and each had attached thereto a pair of detachable locks. In use but one pair of locks can be used on a gun at a time, and it follows that the extra or additional ones are in no sense to be regarded as an indispensable part of the entirety.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Philadelphia, Pa.—J. B. Shannon Hardware Co. has been incorporated, with a capital stock of $100,000.

Wilkinsburg, Pa.—The Welshon Hardware Co. has been incorporated, with a capital stock of $20,000.

Wallowa, Ore.—J. M. and J. B. Craven have engaged in the hardware business.

Benedict, N. D.—Ernest Wilson has engaged in the hardware business.

Cummings, Kan.—Fred Norton has opened a hardware store.

Elma, Ia.—W. P. Need has opened a hardware store.

Sheridan, Mont.—Potter & Johnson have opened a hardware store.

Lucca, N. D.—Dan Hurd has opened a hardware store.

Moriarty, N. Mex.—A. Milby & Co. have engaged in the hardware business.

Columbus, Neb.—James Murray has opened a hardware store.

Kimberly, Idaho.—Art Wilson and W. W. Swearingen have engaged in the hardware business.

Rocky Hill, Conn.—The Rocky Hill Hardware Co. has been incorporated, with a capital stock of $5,000.

Chickasha, Okla.—Taylor & Ferguson have engaged in the hardware business.

Hudson, Mich.—Henry L. Atherton will open a hardware store about October 25.

BUSINESS CHANGES.

Waverly, N. Y.—Joseph Knapp has entered into partnership with E. D. Mixer in the hardware business.

Palo Alto, Cal.—C. T. Bolfing has purchased the hardware business of John Darling.

Anderson, Ind.—Roscoe Van Eaton has sold out his interest in the hardware firm of Van Eaton & Hutchison to Fred Hutchison.

Stockham, Neb.—Art Wilson has sold his hardware stock to John Fuherer.

Ladysmith, Wis.—Geo. Uttermark has purchased the hardware business of J. W. Miller.

Bloomington, Ill.—J. B. Horney has sold his hardware store to Abner M. Dodge.

Asheville, N. C.—W. A. Boyce has sold his hardware stock to the Otto Green Hardware Co.

La Jara, Colo.—The Murphey-Newcomb Hardware Co. has purchased the stock and real estate of the B. L. Van Vechten Hardware Co.

Montesano, Wash.—Phillips Bros. have sold their hardware stock to G. J. Vayhinger.

Schuyler, Neb.—John M. Livingston has purchased the hardware business of J. A. Pence.

Prairie View, Kan.—C. and F. Rhoads have purchased the hardware business of Boogart Bros.

Clyde, Kan.—N. A. Bryan has purchased the hardware business of F. W. Mattoon.

Nevada City, Cal.—The Nevada City Hardware Co. has purchased the hardware stock of the Turner-Hadley Co.

Gregory, Neb.—McFadden & Bowman have purchased the hardware stock of B. J. Kloke & Son.

Bruno, Neb.—J. J. Osthol has purchased the hardware business of J. J. Keefe.

Woodruff, Kan.—J. K. Hilton has purchased the hardware stock of Harbaugh Bros.

Aurora, Neb.—Paul Mato has purchased the hardware store of Rhine Fenster.

Prattville, Mich.—B. B. Bricker has sold his hardware store to Herman Tuttle.

Wellston, O.—W. H. Hotchkiss and John Bain have purchased the hardware store of Melvin Tilley.

MISCELLANEOUS.

Winona, Minn.—The hardware store of Robert Barlow was burglarized.

Jewett, O.—The hardware store of John Harding was destroyed by fire.

Knightsland, Ind.—The hardware store of W. N. Bell & Son was destroyed by fire.

Dallas, Tex.—The hardware store of S. J. Blakeney was destroyed by fire.

Ferdinand, Idaho.—A. H. Nau & Co., grocers and hardware dealers, will in the future devote all their time to their hardware business.

McKinney, Tex.—Chas. Seiglan is contemplating the establishment of a hardware store at Amarillo.

Redondo, Cal.—The Redondo Hardware Co. will erect a new building for their hardware business.

Little Falls, Minn.—J. W. Berg's hardware store was destroyed by fire.

Grand Rapids, Mich.—The store of the Miles Hardware Co. was burglarized.

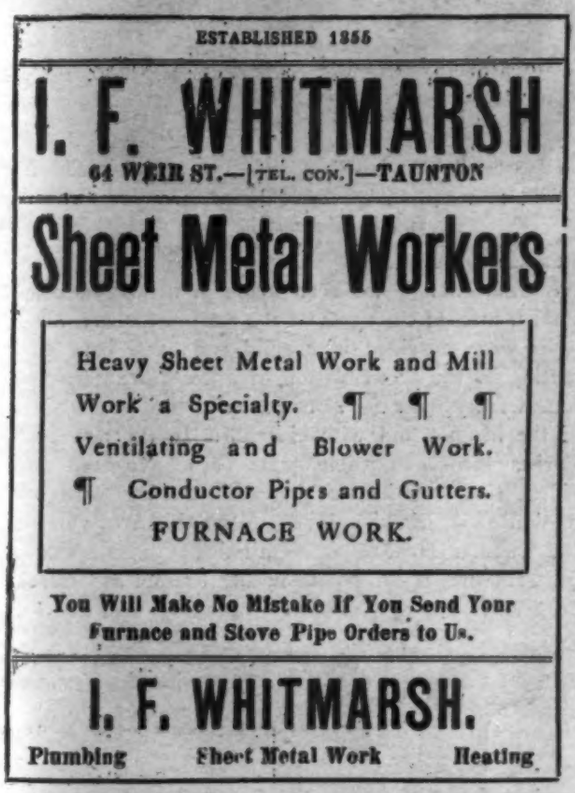
Frankfort, Mich.—The hardware store of Collier Bros was burglarized.

Boston, Mass.—The hardware store of A. S. Morss Co., 210-218 Commercial street, was damaged by fire.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The advertisement of I. F. Whitmarsh of Taunton, Mass., could have been rendered much more attractive had the superfluous rules been eliminated. Furthermore, there is really no occasion for the advertiser's name to appear twice in the ad., at the top as well as at the bottom. The display line "Sheet Metal Workers" should have occupied the space at the top which the advertiser has utilized for his name. Better and more prominent type could then have been used for the body of the ad. With the space at his disposal Mr. Whitmarsh could easily have had a much better



looking ad. had the advice given herein been followed out. The ad. appeared in the *Taunton* (Mass.) *Daily Gazette* of September 2 and occupied six inches of space, with a width of two columns.

* * *

The advertisement of The Reliable Furniture and Carpet Co. of Rochester, N. Y., in which the "Norman Pride" heating stove, made by the Galusha Stove Co. of Rochester, is given special attention, is a fairly good one, as regards arrangement and general make-up. In it, it is pointed out that "The Reliable" has secured the special selling agency for this stove. "The Reliable" is to be commended for the way in which they draw attention to the alleged fact that the "Norman Pride" stove is being imitated. They evidently realize the inadvisability and inexpediency of referring to competitors in any way that would not only do themselves little good but on the other hand would only tend to advertise the people against whom the charges of imitating the goods are made. The latter would be the only ones to derive any benefit from an averment fraught with hard feelings and bitter language. "The Reliable" in taking the stand that it has has acted wisely and in a manner not calculated to lower its dignity as a house handling reliable goods. The ad appeared in the *Rochester* (N. Y.) *Democrat*

and Chronicle of September 26, and occupied seven inches of space three columns wide.

* * *

The advertisement of the Thos. F. Leonard Co. of Scranton, Pa., in which are advertised ash cans and garbage pails, is a fairly good one of its kind, though it would look much better had a little more attention been given to details. In the first place, the words "heavy galvanized" should have been placed directly above the line "ash cans," then it would not have been necessary to divide the word "galvanized." This could have been done had the line "ash cans" been set in the same style type as the line "garbage pails." There is absolutely no reason why capital letters should have been used throughout in the former and caps and

lower case letters in the latter. The prices quoted on ash cans should have appeared in the same style type as the garbage pail prices. Two many varieties of type in an advertisement tend not only to detract from its appearance, but also in many instances to render less prominent features which should stand out and be conspicuous. The ad appeared in the *Scranton* (Pa.) *Times* of September 2, and took up 2½ inches of space, two columns wide.

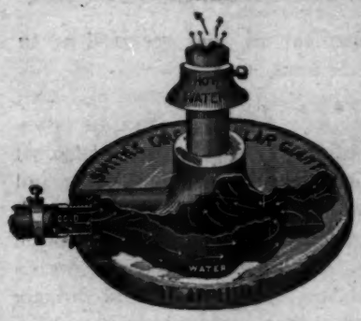
Heating and Ventilating

SMITH'S HOT WATER SPECIALITIES.

Smith's water heaters, manufactured by the Chas. Smith Company, 101 Lake Street, Chicago, can be used in any furnace. The company states that they are the inventors and the patentees of the only jointless hot water attachments that have no obstruction to the natural movement of the water. Many owners of large residences sometimes find it necessary to install an extra furnace in order to heat all parts of the building satisfactorily. The Chas. Smith Company state that by using their hot-water attachments the extra furnace may be dispensed with and the cost and labor of running it saved.

Smith's Cleanable Tank Heater.

Smith's "Little Giant."



Smith's "Circular Giant."

The lime formation trouble, which sometimes occurs in coils and water heaters, obstructing the circulation of the water, is said to be entirely obviated by the Smith cleanable tank heater.

Smith's "Maltese" Heaters.

Smith's "Little Giant" may be used to heat from one to four rooms, or in heating tanks for which purpose it is said to be unexcelled. It is made in four sizes and has no joints.

Smith's "Circular Giant" is especially adapted to furnaces with drum or dome, in which it is claimed to act as a deflector, throwing heat to the sides of the furnace, and increasing the capacity very materially. It is made in six sizes.

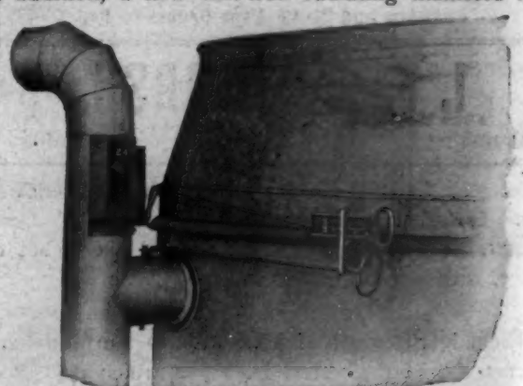
Smith's "Maltese" heaters are made in eight sizes. The three-quarter style is used as a bottom section when a number of sections are coupled together. The smallest sizes are suitable for a 30-gallon tank.

The Chas. Smith Company state that their celebrated "Hero" line of furnaces are meeting with great success wherever introduced. They are made with a cast or steel radiator, and are provided with large double feed-doors and independent grate bars. A catalogue may be made for the asking. When writing for it, kindly mention THE AMERICAN ARTISAN.

THE NEW 1908 FORBES FURNACE.

The Tubular Heating & Ventilating Co., 232 Quarry St., Philadelphia, Pa., have made a number of improvements in the Forbes furnace for 1908 to which they are calling the attention of the trade. This new furnace, they say, is now of such a construction that all the heat units in the coal and gas are liberated, insuring good combustion, and that in this furnace the air to be heated absorbs or extracts a maximum of these heat units as it passes through the furnace. While no change has been made in the actual combustion area of the grate of the Forbes furnace, older types were provided with solid end grate bars, permitting of the accumulation of ashes and interfering considerably with the distribution of heat at the sides of the fire-pot and with cleaning. In the new 1908 Forbes furnace movable grate bars have been provided, the bars interlocking and turning with one motion of the shaking lever. With this arrangement, the Tubular Heating & Ventilating Co. says that a uniform fire at all points in the fire-pot is assured. In addition, a new cast-iron radiating manifold has been installed, the vertical flues being provided with radical fins, increasing the radiating surface, it is said, 150 per cent. Other improvements that have been added are as follows: A baffle plate placed in the base of the furnace, insuring the circulation of air around the fire-pot as well as around the manifold; an extra rise given to the smoke neck of the furnace preventing back drafts; the removal of some twenty joints from the furnace and, in several instances, sectional parts, insuring gas-tightness. A very important feature of the new furnace is the new adjustable check draft damper regulator, shown in the illustra-

Grate of Six Rocking Bars.


Adjustable Check Draft Damper Regulator.

tion. This device has been installed so as to permit of regulation and to obtain the requisite amount of draft for the operation of the furnace with the greatest possible economy. It is placed at the side of the furnace and is operated from the front. With all these new improvements the Tubular Heating & Ventilating Co. believes that the Forbes furnace for 1908 will become one of the most popular furnaces on the market. When writing the company kindly mention THE AMERICAN ARTISAN.

CATALOGUE NO. 22 OF F. MEYER & BRO. CO.

F. Meyer & Bro. Co., Peoria, Ill., have just issued a 36-page catalogue, which is known as Catalogue No. 22, and in which they say is described, "everything needed for setting hot-air furnaces." F. Meyer & Bro. Co. announce that they have changed the slip of their "Handy" furnace pipe entirely. Instead of having two tongues, as formerly, which necessarily required two points of entrance that had to fit at the same time, there is now but one point to enter. The one end being five-eighths of an inch larger than the other, it can practically be thrown together. The slip now is 1⅜ inches long, making it, according to the company, the longest used on any double wall pipe. The usual loss of time and patience is entirely obviated, they say, by the use of this pipe. The "Handy" furnace pipe is very thoroughly described in the catalogue, together with round pipe and fittings, cold-air shoes, casing bonnets, adjustable elbows, square galvanized iron pipe and elbows, nested cold-air pipe, single pipe and fittings, registers of various designs and manufacture, check dampers, damper clips, coal chutes, corrugated asbestos sheathing, etc. Within the last year, F. Meyer & Bro. Co. state that they have greatly improved their adjustable elbows, all of which are made by specially designed machinery. All elbows up to and including 14-inch are made with a very deep bead, so that they can easily be adjusted without undue exertion. They are guaranteed not to telescope or collapse. All large galvanized iron elbows from 16-inch to 30-inch are made with an extra deep bead and are held together by means of a wrought iron angle, fitted with screw bolts. By loosening these bolts any angle can be made, and by drawing up the bolts, it is said that the elbow will be absolutely rigid. When writing F. Meyer & Bro. Co. for catalogue No. 22 kindly mention THE AMERICAN ARTISAN.

"CROWN" VENTILATORS.

The subject of ventilation is very fully treated and "Crown" ventilators fully described in a catalogue just issued by the Crown Ventilator Co., Milwaukee, Wis. "Crown" ventilators, the makers say are constructed according to the principle that the most effective practical way to secure proper ventilation is by gaining a gentle, constant circulation of air wherebty the foul and impure air is carried off, leaving room for fresh air to take its place. The "Crown" ventilator is usually made of galvanized iron; is strongly braced and riveted and has its radial air passages so arranged that when placed upon a stack it will exhaust the hot or impure air from below and will not allow, it is said, a down or return current, keeping up a uniform, constant circulation which leaves space for fresh air to enter below. While the "Crown" ventilator, the makers say, makes a good chimney cap, it is not so good for the purpose as their "Crown" chimney-jack, which is designed and built especially for smoky chimney work. This jack is also made of galvanized iron. It is simpler, and while it is also storm-proof, is more open and much cheaper than the ventilator. The Crown Ventilator Co. says that their chimney-jack fills a long-felt want for a good, substantial, cheap chimney cap, with nothing about it to get out of order. When writing the Crown Ventilator Co., kindly mention THE AMERICAN ARTISAN.

THE AMERICAN FURNACE COMPANY'S FURNACES.

The American Furnace Co., 1911-1915 Pine street, St. Louis, Mo., have recently issued a catalogue in which their furnaces are very fully described and illustrated. The company manufactures the well-known "American" boiler plate furnaces which, they say, are "built like a boiler." They have recently erected a new factory, equipped it with the most modern machinery, and installed a 13-ton riveting machine. All the joints in their heavy steel furnaces are guaranteed to be absolutely tight. Riveting by pressure instead of by hammering not only insures tight joints, they say, but forces the parts together and holds them so that they form almost one solid piece of metal.

"American" furnaces are built on vertical lines and in accordance with the principle that radiant heat produces no perceptible effect upon air, the latter being heated only by conduction or direct contact with hot surfaces. The fire-pots of "American" furnaces are made of one piece of heavy steel, which forms the entire drum except the head. They are lined with what the company says is the very best sectional fire brick set in a circle, making them self-supporting and preventing them from falling out. They extend up to the top of the feed-door or higher if desired, to prevent any damage to the steel, and may be replaced through the feed-door in ten minutes at very little cost. The grates of "American" furnaces are triangular, hollow in the center, and are said to be very strong; either side may be turned to the fire, which prevents them from warping. The bars work separately, which permits the ashes to be removed around the sides without wasting coal through the center, and the ashes may be removed from any part of the fire-pot, it being an easy matter to crush the clinker through the grate. The bodies or drums of "American" furnaces are made in five sizes, all of open hearth boiler plate steel. The feed-pouch and radiators are attached with heavy backing flanges on the inside which prevents the steel from springing away. In the operation of "American" furnaces the heated products of combustion can only escape, it is said, from the combustion chamber by entering the two large descending flues at the top, then down the tube to the dust box where they connect into the ascend-

ing flue, thereby giving, it is said, all possible benefit of the fuel consumed.

The catalogue which the American Furnace Co. is sending out, besides containing a full description of the company's lines of furnaces, contains many useful pointers on the installation and operation of furnaces, together with much other valuable information on furnace heating. When writing for it kindly mention THE AMERICAN ARTISAN.

"A LITTLE TALK ON PROFITS."

The above is the title of an interesting little folder which is being distributed by the Kelsey Heating Co., Syracuse, N. Y. The folder reads as follows:

"On a certain heating job, suppose, just for instance, your figure is $145. You whittled the price down to the last notch, to land the contract,—and, if everything goes well, you will make $25 on the job.

"You get the job just because you were $8 under the next man.

"In the course of a year, suppose you land ten jobs like this one.

"You've made $250 net, above your time and the labor of your men.

"Is it worth while?

"Now, on the other hand, suppose you have the exclusive agency for the Kelsey Warm Air Generator in your vicinity.

"Instead of trying to be the low bidder, price hardly enters the game.

"Instead of trying to convince your man you will be the lowest bidder,—you concentrate your energy and arguments on the distinct advantages the Kelsey system has over any warm air furnace.

"Suppose, just to be safe, out of ten prospective warm air jobs you land only five. You lose the other five because 'your price is too high.'

"But on the five you do land you will make a bigger profit than on ten ordinary furnace jobs!

"Your work, when finished, will be of a much higher grade.

"Each job will give absolute satisfaction. You will have the good-will and the confidence of every man to whom you sell.

"You will,—and mighty soon, too!—get heating jobs at your own price, on which your competitors have not even had an opportunity to figure!

"You can go after much larger heating contracts than would be possible with ordinary warm air furnaces,—go after contracts for heating churches, schools and other public buildings.

"And one thing stands out above all others,—the ease with which you can make sales to people who ordinarily would install steam or hot water systems, rather than take a chance on the ordinary furnace job.

"And at the end of four or five years, where, with the ordinary line of furnaces, you would be selling just about ten jobs a year, at an annual profit of $250,—with the Kelsey agency, in four or five years, you will have the cream of the heating business in your locality,—be making a healthy profit on every sale,—and when you go home at night you can sleep soundly and not worry about an overdrawn bank account."

PARAGRAPHS.

Go after the warm air furnace business in your locality. If necessary, begin with the architect. Point out the merits of the system. Don't let the steam and hot water man get the business bv default on your part. Make the effort. Land the contract. Then give the owner the best piece of work possible.

The Excelsior Steel Furnace Co., 36 W. Monroe street, Chicago, is sending out its 1909 price-list of furnace pipe and fittings, round pipe and elbows, wall stacks, baseboard registers, register boxes, etc. The company's line of furnace pipe and fittings embraces over 1,000 different articles and sizes.

The business of the American Radiator Co. for the fiscal year thus far compares favorably with the corresponding period last year. It is expected that business will increase during the remaining months of the year. The foreign plants of the company are also said to be making a very satisfactory showing.

Sperry's steam kettles, manufactured by D. R. Sperry & Co., hollow ware founders, Batavia, Ill., are made from very thick metal without stay bolts, the joint being packed in such a manner as never to need repacking, it is said. The manufacturers say that they are absolutely safe and tight. When writing for descriptive literature kindly mention THE AMERICAN ARTISAN.

The United States Register Co. are enjoying the most prosperous business in their history. Their plant at Battle Creek, Mich., is being run full, and they have increased their force in order to take care of their rapidly increasing trade. They have installed considerable labor-saving machinery for the manufacture of the Jones side-wall hot air registers.

The Youngstown Furnace & Supply Co. of Niles, O., say that all the latest features in modern furnace construction are embodied in their new "De Haven" all cast furnace. It is provided with a top return flue radiator, a roller bar grate, and is said to have a large radiating surface. It burns all grades of hard coal, soft coal and wood, and is reputed to be absolutely gas-tight. Catalogue and prices may be had upon request. When writing for them kindly mention THE AMERICAN ARTISAN.

The "Gilt Edge" all cast furnace, made in four sizes, Nos. 220, 240, 260 and 280, is one of the newest furnaces of R. J. Schwab & Sons Co., Milwaukee, Wis. The company says that this furnace has achieved a marked degree of popularity since its introduction to the trade. All the parts are of the most substantial construction and the furnace throughout is built on scientific principles. It is guaranteed by the makers to be the equal of any furnace now on the market. When writing for descriptive literature kindly mention THE AMERICAN ARTISAN.

"Imperial" steam and hot water boilers are very fully described and illustrated in the new 44-page catalogue issued by the Utica Heater Co., Utica, N. Y. In addition to this are given price-lists of specialties and several tables of information useful to fitters. The company announces that their factory equipment has been enlarged to provide for a rapidly increasing demand, new methods having made it possible to improve the standard of their workmanship. The following features of "Imperial" boilers the company thinks worthy of mention: "Fire boxes of exceptional depth; direct overhanging fire surfaces of great effectiveness; carefully proportioned flues, arranged for long fire travel and shaped for easy cleaning."

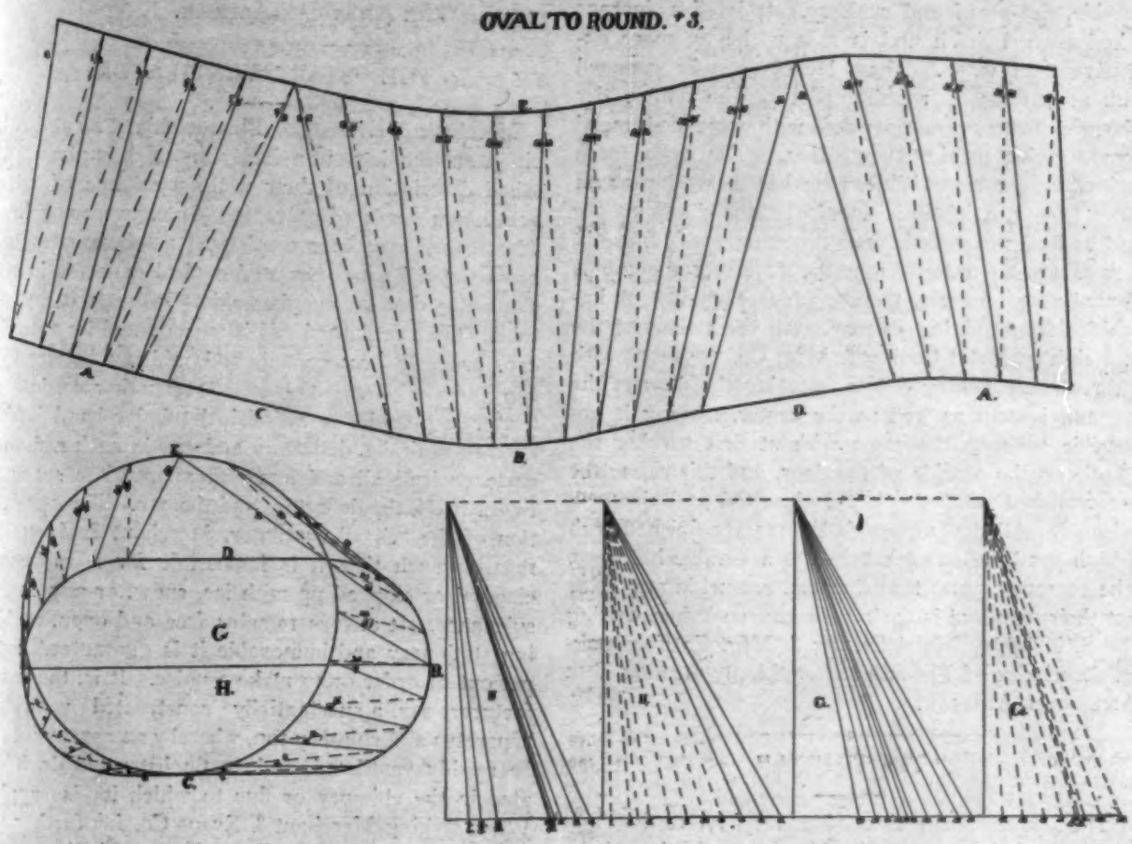
Tinshop

OVAL TO ROUND—NO. 3.

BY G. L. GRAY.

The same method is used in this pattern as for oval to round No. 1 shown on page 32 in the August 29 issue of THE AMERICAN ARTISAN, with the exception that a full pattern has to be made. To avoid having too many lines in one set of triangles, it is best to have two sets of triangles, as here shown by G and H, using the same method to develop pattern as previously explained in oval to round No. 1.

OVAL TO ROUND. #3.



THE W. J. BURTON'S CO.'S GUESSING CONTEST.

The Farmers' Guessing Contest conducted by the W. J. Burton Co., Detroit, Mich., manufacturers and jobbers of tinners' and roofers' supplies, at the Michigan State Fair held in Detroit on September 3-11, was pronounced a great success. Three weather vanes were awarded as prizes, all being finished with pure gold leaf. The first prize was awarded to the individual guessing the nearest to the 230,559 square feet of Burton's "Eastlake" metal roofing shingles used from Sept. 11, 1907, to Sept. 11, 1908; the second to the one guessing the nearest to the 1,087,150 square feet of Burton's smooth and gravel finish asphalt roofing, used in the same time; and the third to the one guessing nearest to the 1,073,889 lineal feet of Burton's galvanized iron gutter, conductor and ridge roll, used from September 11, 1907, to the same date this year. A copy of the W. J. Burton Co.'s guessing blank was given to everyone that registered at their booth and handsome souvenir ash trays were distributed freely to visitors.

CATALOGUE OF THE STAR ENAMELING & STAMPING CO.

The Star Enameling & Stamping Co., Pittsburg, Pa., manufacturers of sheet metal wares, have recently issued a catalogue in which are illustrated and described goods which, they guarantee, will stimulate trade during bad times as well as good, and which they term "trade winning assortments" in sheet metal wares. The japanned ware assortment consists of the most popular items in japanned tin ware, namely bread boxes, flour cans, sugar cans, and foot tubs. The stamped tin ware assortment consists of the most staple items in stamped tin ware, consisting of pot covers, tin, ringed and hemmed, cake pans, pie plates, etc. With this assortment a substantial and valuable pot cover rack is given free. The "Big Five" assortment consists of rice boilers, Berlin kettles, lipped preserving kettles, seamless water pails, and deep dish pans. This enameled ware is furnished in blue, white and gray. The "bargain day" assortment consists of coffee pots, seamless water pails, preserving kettles, dish pans, sauce pans, etc., furnished in blue, white and gray. The "advertising deal" assortment of enameled ware embraces a number of quick-selling items to be sold for 10 cents. These include frying pans, dish pans, milk cans, ladles, wash bowls, buckets, etc. The assortment of "specials" is a very comprehensive one as also is the "short line" assortment, the latter consisting of such articles as tea and coffee pots, kettles, plates, pans, cups, etc. All the goods listed in the catalogue are guaranteeed to be new stock and to be made

of the best material. When writing the Star Enameling & Stamping Co. kindly mention THE AMERICAN ARTISAN.

PHOENIX STEEL LOCKERS.

The S. Keighley Metal Ceiling & Mfg. Co., Pittsburg, Pa., have recently issued a very attractive booklet treating of Phoenix steel lockers, which, they say, are safeguards against fire, filth, vermin and contagion, and are highly recommended by architects and fire underwriters. The single tier Phoenix locker is durable, fire-proof and sanitary. It is of a furnace baked enamel finish and is said to be no more expensive than wood. These lockers can be grouped without cutting or refitting parts. The double tier Phoenix lockers are provided with expanded metal doors, giving perfect ventilation. The open mesh makes the contents visible, allowing inspection at all times. From a hygienic standpoint these lockers are said to be unsurpassed. The "slanting roof" Phoenix lockers are so named from the fact that the top is slanted at 30 degrees, thereby preventing dust or impurities from lodging thereon. All the lockers of the S. Keighley Metal Ceiling & Mfg. Co. are fitted with a three-point locking device, securing the door at the top and bottom as well as the center, making it impossible to open the same without first turning the handle on the outside of the door, and this cannot be accomplished until the key is inserted and the lock released. All the company's lockers are finished with a high grade of enamel, baked to a durable hardness. The company states that they can enamel in any color but their standard is dark olive green. When writing the S. Keighley Metal Ceiling & Mfg. Co. for booklet descriptive of Phoenix lockers kindly mention THE AMERICAN ARTISAN.

"TIN TRUTH."

The above is the title of a very interesting and highly artistic 40-page booklet, recently issued by Follansbee Bros. Co., Pittsburg, Pa., in which are described clearly and concisely the general conditions governing the manufacture of high-grade tin plate together with the processes, methods and raw materials employed in its making, so that those who read may learn what constitutes high-grade plate, what is necessary to its manufacture, and how to select it. The statements and matters set forth in the booklet are based, not only on Follansbee Bros. Co.'s experience and successful operation for more than forty years as jobbers, importers, dippers and finally as complete manufacturers, but also, on the most eminent authorities on tin plate and its manufacture. The booklet is replete with splendidly printed illustrations, all reproduced from photographs taken in the open hearth works and tin plate mills of Follansbee Bros. Co. On the second page is shown a bird's-eye-view of the companys' open hearth works, tin plate and sheet mills. The first chapter in the booklet is devoted to a short history of the growth of the "House of Follansbee" from firms which have been engaged in the tin plate trade for generations. Other chapters in the booklet are devoted to "The Qualities of Roofing Tin Plates"; "Development of the Base Plate"; "Action of Chemical Elements in Raw Material"; "Iron Ore Supply"; "Making of Pig Iron"; "Processes for Making Steel and Iron," and "The Knobbling, Puddling, Bessemer and Open Hearth Processes." Considerable space is devoted to "The Follansbee Hammered Open Hearth Process —Their Mills and Operation," while some very interesting reading is given on "Scott's Extra Coated"; "Follansbee Banfield Process"; "Standard Tin Roofing Specifications"; "Paint as Applied to Tin Roofing," etc. When writing Follansbee Bros. Co., kindly mention THE AMERICAN ARTISAN.

THE "STAR" VENTILATOR.

Merchant & Evans Co., Philadelphia, Pa., and other cities, are sending out a folder in which is given a detailed description of their well-known line of "Star" ventilators, made of galvanized iron, copper or brass. The "Star" ventilator consists of a tubular structure, surmounted by a corrugated conical deflector in such a manner that no opening exists between it and the tube. The ventilator itself is surmounted by a conical cap, properly ornamented, and midway between the cap and the corrugated deflector another conical deflector is placed. A cylindrical tubular band is fastened to the tube, deflectors and cap in such a manner as to encircle all and leave an appropriate space between itself, the deflectors and the cap. The construction of the "Star" ventilator, Merchant & Evans Co. says, is such that it is impossible for it to become clogged or stopped up with ice, snow, or any foreign substance. It always remains free and open, and being stationary and immovable it is guaranteed not to get out of order or to make a noise. It is, the manufacturers say, a substantially constructed ventilating apparatus and chimney top, whereby an apartment may be readily ventilated, and an unobstructed draft created in the chimney or flue to which it is applied. When writing Merchant & Evans Co. for further particulars regarding "Star" ventilators, kindly mention THE AMERICAN ARTISAN.

NON-SCALING METALS.

On certain kinds of goods, notably oil and gas lamps and stoves, there is a demand for a metal which will not scale when heated to redness. If any scale forms, it falls upon the perforations or slots through which the gas issues and prevents the flow. Copper and steel are examples of metals that scale rapidly at a red heat. Low brass and bronze also scale, but not as readily as copper or steel. High brass and German silver scale only to a slight extent, but have the property of becoming brittle before a red heat is reached, or "black-short." This fact, says the "Brass World," precludes their use for the previously mentioned purposes. Aluminum-bronze, containing from 5 to 8 per cent of aluminum, is a non-scaling metal, and, in addition, is not brittle at a black or a red heat. For use in instances where scaling is objectionable it has given excellent satisfaction. It will retain its tough character for a long time when heated to redness and does not scale. The greater the percentage of aluminum in it,

the better it acts. As an 8 per cent bronze is quite hard, if perforating is to be done upon it, a 5 or 6 per cent mixture is generally employed. Nickel is also a non-scaling metal, and has been used for the ignition tubes of gas engines for a long time. The alloys of nickel and copper, if high in nickel, have also the non-scaling property. As the melting point of nickel and its alloys is high, they may be used in cases where a high temperature is desired. For ordinary work, aluminum bronze is satisfactory, and, if a metal with a higher melting point is desired, either pure nickel or one containing a large percentage is necessary.

HOW WM. BUCHANAN ADVERTISES.

The illustration herewith is a reduced reproduction of one side of a blotter that Wm. Buchanan, Fulton street and Sumner avenue, Brooklyn, N. Y., is distributing among his customers. That Mr. Buchanan is an enterprising man and that he is prepared to undertake all kinds of work in the way of roofing, warm-air heating, ventilating, stove and range repairs, etc., is evident from the illustration in which are shown

GRAVEL ROOFING A SPECIALTY

398-400-402½ SUMNER AVENUE. 1387 FULTON STREET, BROOKLYN.

signs which decorate every available part of his shop and plant. Mr. Buchanan has hit upon a good plan of advertising his business by the use of an abundance of signs, and the distribution of a blotter such as is here shown, besides depicting him as an enterprising business man, is almost certain to be attended with good results. Such a plan as Mr. Buchanan's might well be adopted by many others who follow his line of business.

TRADE PROTECTION.

BY W. H. BARNARD, NORFOLK, VA.

The following paper was prepared and read by W. H. Barnard, then secretary, at the fourth annual convention of the National Association of Master Sheet Metal Workers, held at the Palmer House, Chicago, on August 19, 20 and 21.

The National Association of Master Sheet Metal Workers has given the deepest consideration and thought to trade protection and how to bring it about. Undoubtedly there is hardly anything more needful for the interests of the master sheet metal working business than this. What methods to adopt has been the subject of deepest and most earnest thought to those of your officers who have had this weighty subject under consideration.

No doubt to the minds of many of you the printing of the list, "In Accord," is the pathway by which the greatest amount of trade protection can be secured, but I have come to the firm conviction that that practice is vicious, undignified, and misleading. Let me cite herewith numerous reasons why that system does not appeal to me:

First—Ours is a National organization, and we are not supposed to give one kind of advice in one section of the country and another kind of advice in another section, and yet state laws differ very greatly from each other, because what you can do with impunity in some states cannot be done in others, and in a few states of the Union at least there are some very drastic laws, the transgression of which brings the culprit before the courts and subjects him to the danger of a money, as well as a jail penalty.

Second—There are a few local associations in our membership who enjoy a most satisfactory amount of trade protection and are on terms of very close friendship and sympathy with their local jobbing houses. Should we make any exaction, or do anything to destroy the peace and profit of this condition in this community, by dropping one of the said local jobbers from the list "In Accord," because for any reason he had committed an offense in perhaps a neighboring town or city?

Third—It should be incumbent upon every local community to exercise its own ingenuity and stand together for the protection of the business within its own communities. I cannot see where it would be helpful for this or any other National organization, or a concern in Louisville, for instance, to destroy the peace of its business conditions to satisfy a grievance that might exist in, say, Kansas City. It sounds very nice to say that what is one master sheet metal worker's grievance is the grievance of all master sheet metal workers. I can say with every confidence that it would be a beautiful faith to have, that regardless of consequences they would stand together as one man to rebuke some roaming jobber in some particular city. But have we the foolhardiness to believe that such results could absolutely be depended upon? Of course not, and for that reason we should not deceive ourselves, nor pick up a greater burden of responsibility when our own common sense will teach us that we ought to have better sense than to depend upon it.

Fourth—And now as to the attorney's opinion regarding the list "In Accord." Have you read it? Let me repeat it to you. It is as follows:

"Edwin L. Seabrook,

"Pres. Nat. Assn. Master Sheet Metal Workers,

"Philadelphia,

"Dear Sir:

"I have examined the copy of the Master Sheet Metal Workers' Journal which you left with me. If you will strike out the words which I have erased on the eighteenth page, you can, in my judgment, without liability to successful attack, publish the other matters referred to on pages 17, 18 and 19. You may also, from time to time, add any names or strike out names there without making yourself liable for so doing, provided you do not there or anywhere else in the publication say or do anything which in fact reflects upon the character, standing or business of the sheet metal jobbers whose names are not printed, or having been printed, are omitted.

"If I have not broadly enough covered your wish for an opinion, kindly advise me.

"Yours truly,

"(Signed) ALEX SIMPSON, JR."

His advice, as outlined above, absolutely assures you of only one thing—that is, the lawyer's fee—litigation—the result of which no man can determine; it may mean the very destruction of our National organization; it may mean imprisonment; it may mean fines; it is bristling with danger, and I tell you, gentlemen, if it means anything to us, to say the least, it means caution.

In a certain city we have a local that had prepared a paper, or rather an invitation, which they sent to all jobbing houses who dispose of their goods in their locality, and I am perfectly sanguine that by this instrument they will succeed in getting for themselves the fullest enjoyment of trade protection, without destroying the peace and contentment that may prevail in business with the master sheet metal workers of other cities. I repeat what I have once before insinuated—that local communities should contrive or devise methods for their local enjoyment without causing trouble in some other community and our National association should not be used as an instrument to stir up strife in the business communities all over the country where our membership lies.

Suppose, for instance, there might be a master sheet metal worker who is indebted to some jobber or manufacturer and from whom it would be impossible for him to extricate himself, because of the fact of the indebtedness which he might not be able to pay, and suppose this particular jobber or manufacturer had committed such an offense that it was necessary to leave him off the list "In Accord," the aforesaid master sheet metal worker might not be in a position to give his business to the remainder of those on the list "In Accord," and withdraw his trade from the offending member. Can you not see that this would put this master sheet metal worker in a most unhappy and unenviable position? Can you not see that it would put him in an attitude of defying our very law and principle? Is this not itself a most excellent reason why this list could not be consistently observed?

I might go down the line and give many strong reasons why it would be best for local communities to be loyal to each other and avoid that which is a menace to its business peace and enjoyment.

NOTES AND QUERIES.

"STANDARD" GASOLINE LIGHTS.

From J. E. Kercher, Wolcott, Ind.

Who makes "Standard" gasoline lights?

Ans.—Standard-Gillett Light Co., 930 N. Halsted St., Chicago.

INCANDESCENT KEROSENE MANTLES.

From Casselton Hardware Co., Casselton, N. D.

Who manufactures incandescent kerosene mantles for lamps?

Ans.—Alter Light Co., 40 Franklin St., Chicago.

EYELET PUNCHES.

From the Badger Steel Roofing & Corrugating Co., La Crosse, Wisconsin.

Where can we get eyelet punches?

Ans.—Dennison Mfg. Co., 128 Franklin street, Chicago; Vaughan & Bushnell Mfg. Co., 885 Carroll avenue, Chicago.

ITEMS.

The Master Sheet Metal Workers of New Orleans, La., have formed a local association which will in time be affiliated with the National Association.

The Quinn Wire & Iron Works of Scranton, Ia., will move to Boone, Ia., where a new plant will be erected for the manufacture of hardware specialties.

The Atlanta Tin Plate Co., of Noblesville, Ind., has purchased 10 acres of property adjoining its plant for the erection of new buildings and for extensive additions to its galvanizing department. Two additional hot mills, it is said, will also be constructed.

The Texas Association of Master Sheet Metal Workers held its annual convention at San Antonio on October 2 and 3, in the assembly room of the Business Men's Club of San Antonio, the address of welcome having been delivered by J. B. Carrington, secretary of the club.

The Sabraton plant of the American Sheet & Tin Plate Co. at Morgantown, W. Va., was started up on October 5, after a shutdown of three weeks. The plant consists of 10 hot mills and 12 cold mills, the capacity of the plant being about 2,000 tons of black plate for tinning per month.

The Ramsey Mfg. Co., of Camden, N. J., has been incorporated with a capital stock of $600,000 to manufacture machinery for making cans, etc. The incorporators are Chas. Wesley Outen; Isaac M. Shelley; Robert C. Lattimer; Andrew Thompson; Milton P. Herbert; Chas. E. Rees; Chas. E. Rees, Jr., and Wm. B. Macdonald.

Henkel's automatic rain water shifter, made by the Henkel Mfg. Co., Canal Dover, O., permits, it is said, only pure clean rain water to enter the cistern, automatically carrying off the first dirty water from the roof to the waste pipe, the water not entering the cistern until it is free from impurities. When writing for circulars, prices and full information kindly mention THE AMERICAN ARTISAN.

The Canton ventilator made by The Canton Mfg. Co., Canton, O., is made with metal and glass tops, with and without an automatic closing device. The Canton Mfg. Co. states that this ventilator has become quite as popular as their "Standard" lock-joint metal shingles, which are suitable for any style of roof, gables, mansards, dormers, etc. These shingles besides being ornamental in appearance are guaranteed to be absolutely weather-proof. They are very easily applied, no solder being required. When writing The Canton Mfg. Co. kindly mention THE AMERICAN ARTISAN.

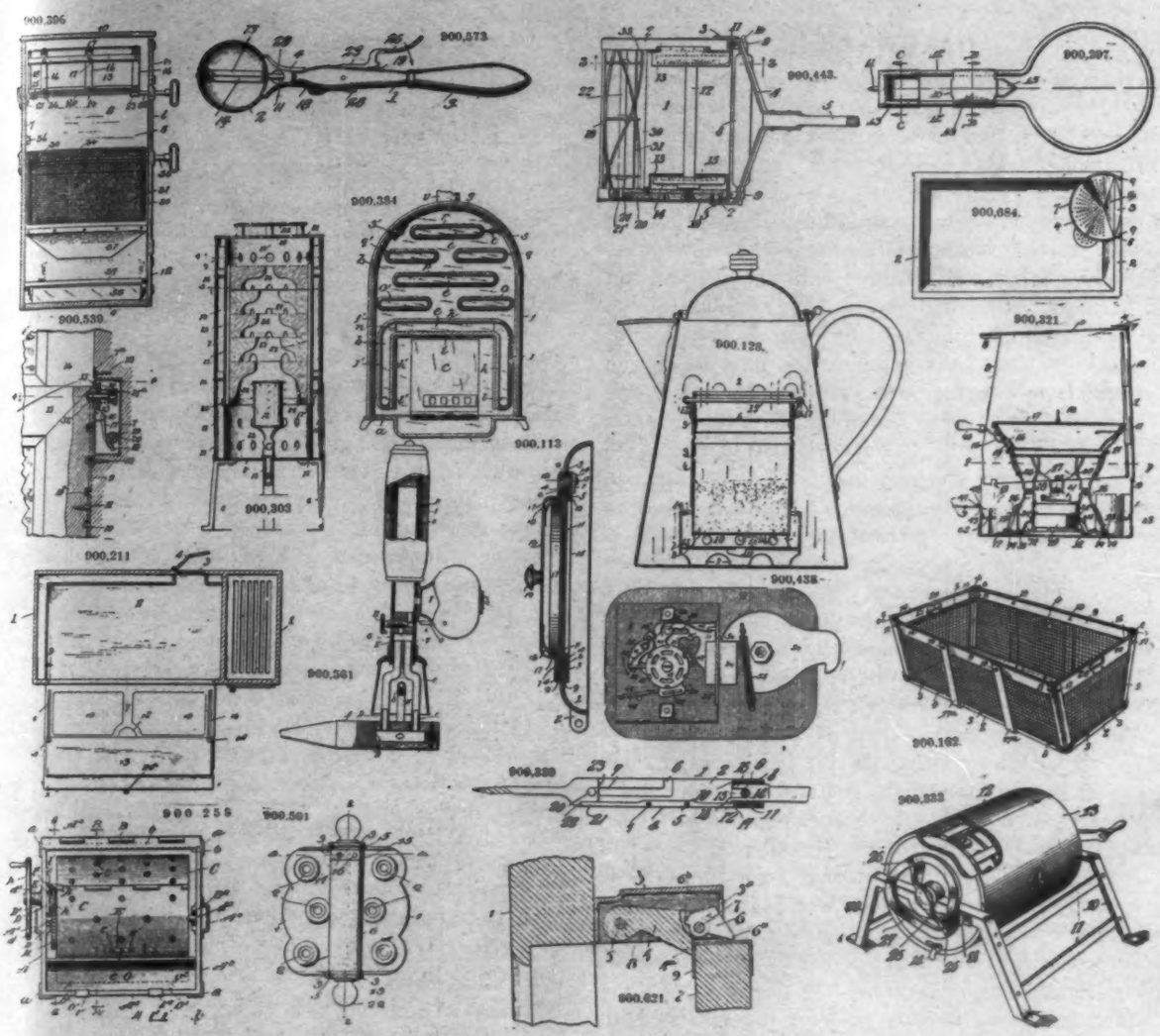
Berger Bros. Co., Philadelphia, Pa., request the trade to send for samples of their Keystone boiler handles. For oval boilers the No. 1 size is used, No. 2 being the size for square boilers. The No. 3 extra heavy for oval boilers can be shaped to fit square end boilers. The sides are of heavy stamped steel and tinned. When writing Berger Bros. Co. for samples kindly mention THE AMERICAN ARTISAN.

At a recent meeting of the Brooklyn Association of Master Sheet Metal Workers it was announced that there are now 24 apprentices studying at the apprentice school recently established at Pratt Institute, through the efforts of a committee of master sheet metal workers of which Wm. Buchanan is chairman. There were upwards of 40 applicants for admission into the school and it is now a problem as to what shall be done to take care of those who, by reason of lack of accommodation, have been denied admission. The committee had made arrangements at first whereby 18 applicants could be admitted, and the fact that more than double that number have applied for admission into the school has aroused the interest of the committee to enlarge the scope of their project.

Mr. J. R. McLaughlin, who for the past 18 years had been connected with the Lisk Mfg. Co., Canandaigua, N. Y., is now general manager of the Atlantic Stamping Co., of Rochester, N. Y., manufacturers of high-grade sheet metal goods, having accepted that position on October 1. Mr. McLaughlin's numerous friends among the trade will be pleased to learn that he has made such satisfactory connections. The important position which he held with the Lisk Mfg. Co., and the number of years of faithful service rendered by him to that concern give assurance that as general manager of the Atlantic Stamping Co. he will bring to it intelligence of a highly valuable character relative to the manufacture of sheet metal goods. The Atlantic Stamping Co. is to be congratulated upon having secured the services of Mr. McLaughlin for the position which few men of his experience and ability are better qualified to fill.

The American School of Correspondence, Chicago, announces that its courses in sheet metal work, roofing, cornice work, tinsmithing, plumbing, heating and ventilation, and mechanical engineering, have been written especially for home study by practical men and are as complete and practical as they can be made. In addition to giving the most comprehensive instruction in the usual work, the school lays particular stress on the sheet metal pattern drafting course, giving special attention to the design and construction of skylights. The advertisement of the American School of Correspondence appears in this issue. A coupon appears in connection therewith which they request all those interested to fill out and mail to them. When writing the American School of Correspondence kindly mention THE AMERICAN ARTISAN.

NEW PATENTS.



900,113. Oven Door. William A. Moore, Dayton, Ohio. Filed Oct. 18, 1907. Serial No. 397,985.

900,128. Coffee Steeper. Jacob Steinberg, Pittsburg, Pa. Filed Dec. 23, 1907. Serial No. 407,810.

900,162. Wire Basket. Thomas J. Goodwin. Cleburne, Tex. Filed July 20, 1907. Serial No. 384,768.

900,211. Illuminated Oven For Stoves. Fred Santoski, Stevens Point, Wis. Filed April 24, 1908. Serial No. 429,003.

900,258. Washing Machine. William F. Blake, Harvey, Ill., assignor, by mesne assignments, to Paragon Mfg. Co., Chicago, Ill., a corporation of Illinois. Filed Dec. 24, 1906. Serial No. 349,261.

900,297. Jar Opener. Joseph F. McCain, Chicago, Ill. Filed March 3, 1906. Serial No. 303,971.

900,303. Gas Heater. John S. Panasevitch, Bridgeport, Conn. Filed Dec. 26, 1907. Serial No. 408,100.

900,321. Traveling Cooking Utensil. Louis K. Sone, New York, N. Y. Filed Feb. 23, 1906. Serial No. 302,347. Renewed March 19, 1908. Serial No. 422,085.

900,333. Washing Machine. Willie D. Whitney, Holley, N. Y. Filed Oct. 14, 1907. Serial No. 397,399.

900,339. Tool Handle. Willis B. Woodruff, Cadiz, Ky. Filed Nov. 30, 1907. Serial No. 404,624.

900,384. Wood Burning Stove. George G. Kaiser, Harrison township, Clay county, Ind. Filed March 23, 1908. Serial No. 422,668.

900,396. Ash Sifter. Gustave Lange, Chicago, Ill. Filed Nov. 25, 1907. Serial No. 403,671.

900,438. Combination Lock. Frank Soley, Philadelphia, Pa., assignor to Miller Lock Company, Philadelphia, Pa., a corporation of Pennsylvania. Filed April 5, 1907. Serial No. 366,590.

900,443. Lawn Mower. William E. Steuben, Visalia, Cal. Filed Aug. 6, 1906. Serial No. 329,394.

900,501. Screen Door Spring Hinge. Albert Falkenrath, Racine, Wis., assignor to Racine Metal Stamping Company, Racine, Wis., a corporation of Wisconsin. Filed Jan. 15, 1908. Serial No. 410,893.

900,539. Window Lock. Charles C. Higgins, Woodmere, N. Y. Filed March 18, 1908. Serial No. 421,828.

900,561. Self Heating Soldering Iron. Frank J. Mann, Scranton, Pa., assignor to Self-Heating Soldering Iron Company, a corporation of New York. Filed Dec. 21, 1907. Serial No. 407,511.

900,573. Ice Cream Spoon. Charles E. McCarren, Cincinnati, Ohio. Filed June 26, 1908. Serial No. 440,564.

900,621. Door Holder. Henry G. Voight, New Britain, Conn. Filed June 26, 1908. Serial No. 440,432.

900,684. Drainer For Kitchen Sinks. George W. Knapp, Baltimore, Md., assignor to National Enameling and Stamping Company, a corporation of New Jersey. Filed Aug. 9, 1907. Serial No. 387,804.

Trade Report.

HARDWARE.

Taken as a whole, the hardware market is improving. Manufacturers generally report a larger volume of orders, but there is still a marked conservatism among buyers, which, it is expected, will be cleared up after the election. Retailers in all parts of the country are now laying in lines of goods for the holiday season. Dealers in the local markets express themselves fairly well satisfied with the present run of business, while the outlook for a good routine business over the balance of the year is very bright. Orders for wire nails continue to come in slowly. Consumers are buying in a routine way, and generally against immediate requirements. Business on the books of the mills, however, is still of good proportions, and they are busy under the increasing volume of specifications against old contract business. It is believed, moreover, that the stocks of nails in the hands of both jobbers and retailers in all sections of the country are small, and that larger contract business will be forthcoming during the last two months of the year. Prices generally are firm, and none subject to concessions. Cut nails do not show any marked improvement. Mills report a small routine business coming in, but there is an almost total absence of contract orders. In the local market there is a fair demand for small lots, and prices are still a little irregular. Barb wire makers report a better demand from all sections of the country, especially the South and Southwest, and there is a good business in prospect. Prices are generally well held. Fence manufacturers are placing some good-sized orders for plain wire, and mills report a good-sized business on their books with prices firmly held.

The base price of wire nails at the mill is $1.95 per keg. The jobbing price is $2 at the mill for full carloads, $2.10 at the mill for less than carloads and $2.40 out of store. The base price of cut nails at the mill is $1.80 per keg. The jobbing price is $1.85 for full carloads at the mill, $1.95 for less than carloads at the mill and $2.25 out of store.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' carload lots, $1.95; retailers' carload lots, $2; painted barb wire, jobbers' carload lots, $2.10; retailers' carload lots, $2.15, with 30 cents for galvanizing; plain wire to jobbers in carloads, $1.80 and to retailers in carloads, $1.85.

TIN PLATE.

Business in the tin plate market is by no means brisk, and the demand for tin plate is over for the season, and only an order here and there is available. Prices are $3.89 for 100-pound coke plates f. o. b. New York, and $3.70 at Pittsburg mills, with the independents quoting $3.65.

Am. coke tins, I. C., from store, New York:

Bessemer steel, 107 lbs., 14x20	$4.35@4.40
Bessemer steel, 100 lbs., 14x20	4.20@4.25
Bessemer steel, 95 lbs., 14x20	4.10@4.15
Bessemer steel, 90 lbs., 14x20	4.00@4.05

Am. charcoal terne, 8-lb. coating:

Worcester grades, 14x20, 107 lbs	4.30@4.35
Worcester grades, 14x20, 100 lbs	4.15@4.20
Worcester grades, 20x28, 200 lbs	8.05@8.10

For prompt shipment, f. o. b. mill:

Coke, tins, 14x20, I. C	3.85@3.90
Coke, tins, 14x20, 100 lbs	3.70@3.75
Coke, tins, 14x20, 95 lbs	3.65@3.70
Coke tins, 14x20, 90 lbs	3.60@3.65
Charcoal, terne, 20x28, I. C	7.30@7.35
Charcoal, terne, 20x28, 200 lbs	7.00@7.05

Usual difference for odd sizes and weights.

SHEETS.

The sheet mills are operating at about 50 per cent of capacity and there is a general scramble for the business that is going. There is very little stock to be drawn from either the warehouses of the makers or the jobbers. It is reported that concessions of $2 per ton are being made openly.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

	Galvanized Net.
No. 30	$4.05
No. 29	3.80
No. 28	3.65
No. 27	3.35
Nos. 25 and 26	3.15
Nos. 22 and 24	2.95

COPPER.

There has not been very much activity in the market for ingot copper during the past week, though from the producer's standpoint the situation is fully as firm as it was a week ago. The Calumet & Hecla is reported to be holding its product at 14 cents, and seemingly is contented to wait until the orders now on its books are filled before reaching out for new business. A similar statement applies to other large producers, most of them being well sold up for October, though with very little business in sight after the end of the month. There is a general disposition on the part of consumers to wait until the unsettling influence of the national election has passed away, and meanwhile they are taking such lots as are necessary to supply their current moderate demands. Stocks are small, and the needs of manufacturers are slowly increasing, but a general revival is looked for after election, as underlying business conditions are sound. Recent sales from first hands have been at 14 cents for Lake, 13⅞ cents for electrolytic and 13½ cents for prime casting copper. New York speculative interests quote Lake at 13½@13⅝ cents, electrolytic at $13.45@13.55 and prime casting brands at $13.25 @13.30, all for spot and last quarter deliveries. The New York Metal Exchange quotes even lower prices than the above, but as no copper is selling at the low range quoted the published quotations are of little value. The London market has shown considerable strength, prices having rallied, owing to the more pacific news from the Balkans. Sheet copper is firm and unchanged, the base price being 18 cents. There

has been no change in yellow metal, quotations being 17 cents for dimensions, 15 cents for sheathing and sheathing nails, 16 cents for slating nails and 17 cents for keel and stem metal. The base price on copper wire is unchanged at 15¼ cents, with trade moderate.

SPELTER.

There is a quiet demand for spelter, St. Louis quoting the market unchanged at $4.60@4.65, while the New York quotation is slightly higher at $4.77½@4.85. The Boston jobbing price is steady and unchanged at 5@5⅛ cents. London quotes spelter at £19 15s.

PIG IRON.

The local pig iron market is still very quiet, business being less active in New England and the middle states than in the West. There is a disposition to hold back orders until after election, and a good many inquiries are now pending, confirmation of which is conditional upon the election result. The actual business being done is of exceedingly moderate volume, and while some improvement is noted in certain quarters, it is very slow in coming, and is not important enough to give the market any air of activity. Some little business is being done for deliveries in the first quarter of 1909, but most of the current transactions are for small lots for early shipment. The furnacemen are not showing any anxiety over the situation, and are not disposed to press sales to any extent. Stocks are moderate, the outstanding warrants showing clearly how small they really are. The current production has been well taken care of, and the market is in good shape to meet returning activity in the foundry trade. Prices are very steadily held, and while there may possibly be some shading at first when business really starts up again, it is likely to be only temporary, as all other conditions except the actual demand favor higher prices, Alabama iron is firm at $12.50@13.00, f. o. b. Birmingham, and some moderate sales have recently been made at the higher figure. Virginia iron is steady at $18.50@19.00, delivered on the wharf in Boston, 83 cents a ton being added for all-rail freight. There is no change to be noted in Pennsylvania iron, the current quotation being $17.50@18.25, New England delivery.

CHICAGO MARKET.

Lake Superior charcoal	$19.50
Northern foundry No. 1	17.00@17.50
Northern foundry No. 2	16.50@17.00
Northern foundry No. 3	16.00@16.50
Southern foundry No. 1	17.35@17.85
Southern foundry No. 2	16.85@17.35
Southern foundry No. 3	16.35@16.85
Southern foundry No. 4	15.85@16.35
Southern No. 1, soft	17.35@17.85
Southern No. 2, soft	16.85@17.35
Southern Gray forge	15.60@16.10
Southern mottled	15.35@15.60

PITTSBURG MARKET.

No. 1 foundry	15.60@16.10
No. 2 foundry	15.25@15.50
Gray forge	14.25@14.50
Bessemer	15.90@16.15
Basic	15.15@15.40

BIRMINGHAM MARKET.

No. 1 foundry	13.00@13.50
No. 1 soft	13.00@13.25
No. 2 foundry	12.50@12.75
No. 2 soft	12.50@12.75
Gray forge	11.00@11.50

Rogers, Brown & Co., Cincinnati, will say in their weekly report: "The local situation is representative this week of the entire pig iron buying field. Consumers have practically covered for their requirements to the first of 1909 and, in consequence, current sales are small and the interest and inquiry which should be running strong now for next year's business are waiting more or less impatiently until after the election. Aside from a little spurt in business here and there, of short duration, the market as a whole is sluggish.

"Consumption is keeping up extremely well and production likewise. September showed a total production of 1,416,000 tons of pig iron, an increase of over 50,000 tons over August. This, with a shorter month. It is the best monthly production since November of a year ago and is believed to have gone directly into melt. This is manufacturing at a rate of seventeen million tons a year, and, as this pace will in all probability be maintained or exceeded during the remaining three months, the total showing will be a great deal better than was contemplated early in 1908. Examining further, production of seventeen million tons for this year will be greater than any previous year, with but five exceptions.

"Deliveries on contracts keep up well and small spot business is fair. The greatest variation in price and policy consists in regard to business for 1909. Some furnaces still refuse to quote for any deliveries, others for business beyond the firt quarter, and those who are willing to consider business are at wide variance as to prices. All of this, we believe, has a tendency to discourage generous buying, which should, and probably will, take place for such deliveries before long.

"Coke continues fairly active and the prices without change. Production is keeping up well and movement of coke from all districts is quite satisfactory. The coke industry for 1907 is interesting, showing some 99,000 ovens in use during the year, producing 40,779,000 tons of coke. The value of this coke at the ovens per ton was the greatest in the history of the coke trade."

Matthew Addy & Co., Cincinnati, will say in their weekly report: "New business this week has been made up mainly of small lots. The real feature of the situation is the immense amount of tonnage that is being hung up until the situation is safely and satisfactorily over. There is a remarkable inquiry right along from consumers who are trying out the market to find out what they can do, but who do not intend to buy at present. They are waiting on the election. And as we get farther and farther along in the campaign it is more and more evident that business and politics for the time being are going hand in hand. The uncertainty of the political situation has not particularly improved the present iron market—very much on the contrary. But in spite of politics the situation, all things considered and in the long run, has improved. A year ago this month came the cataclysmic upheaval in the iron trade when prices in a few days were reduced 50 per cent and a proud, prosperous industry crippled and almost paralyzed. Then you could hardly give iron away. For a year things have been getting better. But it was a business earthquake—that is the exact truth—and the process of readjustment and rehabilitation must be slow. There is no denying that at present the country is using up its finished iron faster than it is making and replacing the loss by wear and tear. This under-consumption will presently have to be made up and the iron trade then will come to its own again. In the meantime it is a tedious waiting game.

"During the week prices have not been changed. Producers are holding quotations firm and there is really no serious objection on the part of buyers to the prices quoted. They realize that the prices are fair enough. One of the features of the large tentative present inquiry is the wish to contract as far into 1909 as possible. The furnaces wish to sell not beyond March, while the consumers want to buy up to the 1st of July."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 65
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$17 50@$18 00
North'n Fdy., No. 2	17 00@ 17 50
North'n Fdy., No. 3	16 50@ 17 00
Southern Fdy., No. 1	17 35@ 17 85
Southern Fdy, No. 2	16 85@ 17 35
Southern Fdy., No. 3	16 35@ 16 85
Southern Fdy., No. 4	15 85@ 16 35
Southern No. 1 Soft	17 35@ 17 85
Southern No. 2 Soft	16 85@ 17 35
Southern Gray Forge	15 60@ 16 10
Southern Mottled	15 35@ 15 60
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	18 85@ 19 35
Southern Silveries, 5% Silicon	19 35@ 19 85
Southern Silveries, 6% Silicon	19 85@ 20 35
Jackson Co. Silveries, 6 per cent	19 90@ 20 40
Jackson Co. Silveries, 8 per cent	20 90@ 21 40
Jackson Co. Silveries, 10 per cent	21 90@ 22 40
Malleable Bessemer	17 25@ 17 75
Standard Bessemer	18 25@ 18 75
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12 per 100 lbs.	$2 20@$2 30
No. 14 per 100 lbs.	2 25@ 2 35
No. 16 per 100 lbs.	2 35@ 2 45
Nos. 18-20 per 100 lbs.	2 60@ 2 65
Nos. 22-24 per 100 lbs.	2 65@ 2 70
No. 26 per 100 lbs.	2 70@ 2 75
No 27 per 100 lbs.	2 75@ 2 80
No 28 per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10 per 100 lbs.	$3 05@$3 10
Nos. 12-14 per 100 lbs.	3 05@ 3 10
No. 16 per 100 lbs.	3 05@ 3 10
Nos. 18-20 per 100 lbs.	3 15@ 3 .5
Nos. 22-24 per 100 lbs.	3 30@ 3 35
No. 26 per 100 lbs.	3 50@ 3 55
No. 27 per 100 lbs.	3 70@ 3 75
No. 28 per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24 per 100 lbs	$4 90
No. 26 per 100 lbs.	5 00
No. 27 per 100 lbs.	5 10
No. 28 per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20	$3 05
" " No. 22-24	3 10
" " No. 25-26	3 15
" " No. 27	3 20
" " No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	18 c
Commercial ½ & ½ per lb.	17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks case, per cwt.	$7 15
300 lb. Casks per cwt.	7 15
Sheets per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4 c
Bar	4 c
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils per 100 lbs.	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40%
Coopers'.	
Barton's	20%
White's	15%
Railroad	
Plumbs	40%
Ship.	
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	00c

Shells, Loaded—

Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%

Union Metallic Cartridge Co.:

New Club, Black Powders	40%
Nitro Club, Smokeless Powders,	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%

Winchester:

Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.	Each.
DuPont's Sporting, kegs	$ 50
" " ½ kegs	2 50
" " ¼ kegs	1 40
Dupont's Sm'k'less 50-lb. drum	22 45
" " 25-lb. kegs	11 30
" " 12½-lb. kegs	5 80
" " 6¼-lb. kegs	2 97
" 1-lb. cans	15

Shot.	
Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 3-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 40
No. 1050 Handled "	50
Shouldered, assorted, 1 to 4, per gro.	$1 20
Patent asst'd, 1 to 4 "	85
Harness.	
Common "	95
Patent "	90
Peg.	
Shouldered "	1 20
Patent "	60
Scratch.	
No 1 handled "	4 80
No. 15, socket handled per doz.	1 25
No. 7 Stanley	1 80
Sewing.	
Common per gro.	90
Patent "	80

AXES.

Boy's Handled.	
Lippincott, 3 lb per doz.	$6 00
Falls City "	6 00
Bread.	
Plumbs, West, Pat	33⅓%
" Can. Pat	40%
" Firemen's (handled) per doz	$1, 75
Plumbs, Miners' (handled) "	6 75
Single Bitted (handled)	
Gladiator . 3 to 4 lbs , per doz	$11 00
Flint Edge " " "	9 25
Standard " " "	9 25
Elec Chopper, Forest Clipper	10 50
Perfect Premier " "	10 00
Crown " "	7 00
Single Bitted (without handles)	
Gladiator 3 to 4 lbs. per doz.	$8 50
Flint Edge. " "	7 00
Standard " "	7 00
Electric Chopper " "	8 25
Perfect " "	7 75
Crown " "	6 25
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	11 50
Flint Edge. " "	9 75
Perfect " "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c
4 to 4½ lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point per cwt. $3 75

BASKETS.

Clothes.			
Small Willow per doz.	$7 00		
Medium " "	8 75		
Large " "	10 50		
Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz.	$4 75	6 50	8 00

BEATERS.

Carpet.	per doz.
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10
Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch per doz.	$8 50
10-inch "	10 50
Moulders'.	
12-inch "	12 50

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%
Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00
Hand.	
Hand Bells, polished	50&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%
Farm, lbs 40 50 75	100
Each $1.25 1.60 2.35	2.85

BEVELS, TEE

Stanley's, rosewood handles new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	25%
" " Large " $26.00	25%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " "	1 75
American Snail head "	75
" Rose " "	90
" Flat "	75
Mayhew's Flat "	1 25
" Snail "	1 25
Dowell	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern per doz.	$0 60
German "	65
Gouge "	80
Spoon "	80
Countersink "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 2 " "	1 —
No. 340 Shepardson's "	—
No. 1 Smith's "	— —

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ⅞ & 1⅛-in. 40%
Clock Spring 40%
Star 15%
Coil ..... each, $1 50
Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%
Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 6, 16, 26 & 045 .. 4 25
Triumph 3 50
Forest Clipper 3 00

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%
Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS. (New List)

Stove ..... 50&10%
Wash.
Globe, single ..... per doz. $2 50
Globe, double ..... " 3 35
Peace Maker ..... " 3 00
Crystal Glass ..... " 4 00
Brass King ..... " 4 00
Nickel Plate ..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 63
No. 00, " ..... " 1 38
No. 0, " ..... " 1 80
No. 3, lead ..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated .. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter ..... 70&10%
Carriage, sizes larger and longer than ⅜x6 ..... 60&5%
Machine, ⅜x4 add sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅜x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 60&10%
Tire 75%
Wagon Box Strap 70%
Mortis, Door.
Gem, iron 60%
Gem, bronze plated 20%
Barrel.
Cast 60%
Wrought .....
Wrought, bronzed 50%
Flush.
Wrought ..... 50&10%
Spring.
Wrought .....
Wrought, heavy .....
Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00
Bung.
Dos.
Enterprise Mfg. Co 's No 1 ... $14 00
" " " No 2 .. 18 50

BOXES

Mail, No. 1 2 10
Per doz $3.50 5.00 17.50
Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each, $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 66 to 146 ..... 50%
" No. 0108 ..... $3 50
" No. 08 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 60
Shelf.
Cast Iron, bronzed ..... 50-10&5%
Clover Wrought Steel ..... 70&10%
Clover Folding 70%

BROILERS.

Wire 70%
No. Cwron, Self-basting, 30 lbs .. $3 00

BUCKETS.

Pump, Rubber.
Wychoff ..... per gro. $4 75
Cooper ..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75
Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, tbp ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 30%
Tinners' Iron Burrs only ..... 65&5%

BUTTS.

Cast Iron ..... 70&5%.
Wrought Brass (New List) 40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 731 and - ..... 70&10%

CALIPERS.

Double ..... 55&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M $3 75
Toe.
Shoenberger ..... per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25
Milk.
Holstein.
Nos 300 301 302
Gals 5 8 10
Per doz $26.00 $27.00 $29.00
Chicago Pattern.
Nos 105 108 110
Per doz $19.00 $21.50 $23.00
Iowa Pattern.
Nos 408 410
Per doz $23.50 $24.50
New Elgin Pattern.
Nos 705 708 710
Per doz $25.00 $27.00 $28.00
Burn Pattern
Nos 700 701
Gals 8 10
Price $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each, $3 85
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 2 85
Myers' Clover Leaf ..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll's, No. C ..... per doz. $4 25
Wildermuth's,.
Nos 1 2 3
Per doz $5.00 $5.75 $6.25
Nos 4 5 6
Per doz $6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide ..... " 3 25
Without Slide ..... " 2 55
Bright Ox Chains.
⅝-in. $7.35; ½-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.50 $6.00 $7.00 $8.20
Inch ..... 5/16 ⅜ ½ ⅝
Per 100 lbs. $6.00 $5.00 $5.75 $5.65
Inch ..... ⅝ 1 1⅛
Per 100 lbs $5.55 $5.55 $5.65
Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.
Cow Tie Chains.
American, 2 toggle ..... 50&5%
" toggle and snap ... 50&5%
" open and closed ring ..... 50&5%
Halter Chains.
American, new list 33⅓%
German 60%
Niagara, new list 40%
Brown's, " 40%
Picture Chains.
Light Brass, 3 ft ..... per dos. $0 65
Heavy Brass, 3 ft .... " 1 00
Pump Chain
Galvanized, per 100 lbs $5 50
Safety Chain.
Brass 60%
Special Steel Loading Chain.
Inch ..... ½ 9/16 5/8
Per 100 lbs $16.00 $13.50 $12.50
Stretcher Chains.
5/16-in. $8.50; ⅜-in. $7.75 per 100 lbs.
Tie-Out Chains.
Brown's ..... 70&5%
Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 33c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 38c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 3c per pair for Hooks.
Add 2c " for Twist Link.
Wagon Stay Chains.
Inch ..... ½ 9/16 ⅝
Per 100 lbs $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gro. 75c
Red ..... " 65c
White ..... " 55c
Common White School Crayon ..... " 8c

CHARCOAL.

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Iwan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round per doz $2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20
Cold.
Good quality, ⅝ in. and larger ..... per lb. .12c
Smaller size per dos .....
Socket, Framing and Firmer.
Clover ..... 75&10%
Tanged, Firmer.
With handles ..... 30&5%
Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood,
Gal 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel ..... 65&7½%
Common Dash, Gal. 4 5 6
Per dos $7.75 $8.50 $10.50
Union, Gal 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's 30%
Carpenters'.
Steel Bar 25%
Hose.
Sherman's, brass, ⅝-in., per dos .. 42c
Double, brass, ⅝-in., " 90c
Saw Filers.
Disston's list, $30.00 ..... 30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle " $0.90
Solid steel ..... " 1 00
Giant ..... " 50

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%
Pot.
Wire ..... per doz. $0 55
Side-Walk.
Steel ..... per dos. $3 25
XLCR ..... 65&5%

CLEAVERS

Family.
Griffin, Inch 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 3 25
Butchers.
Plumbs 25%

CLEVISES

Malleable ..... 5½c lb.

CLIPPERS.

Bolt ..... $1.90@4.75

CLIPS.

Axle ..... 65&5%
Damper.
Standard ..... per doz. 65c
Troy ..... " 38c
Hame ..... " 17

CLOTH.

Emery.
Star 50%
B. & A 50%
Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll ... 2 75
4 and 5 ..... " .. 3 00
6 ..... " .. 3 25
7 and 8 ..... " .. 3 75
Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs .. 60, 10&5%
Lever Bibb Cocks ..... 60, 10&5%
Compression Hose Bibbs .. 50—10&5%
Telegraph Faucets (new list) .. 50—5%
Racking Cocks (new list) ... 60, 10&5%
Compression Lock C'ks (new list) . 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per dos $0 85
Milk Can Faucets, per dos .. $2.60-4.20
Petroleum Faucets ..... 75&5%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .. per gro. $1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 5.50 4.25

COMBS, CURRY.

Nos ... 000 11 15 30 80 108
Per Doz .. $.37 .60 1.90 .90 1.15 .80
Nos ... 299 320 300 532 620 1400
Per Doz. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' ..... 60—10—10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb ..... per lb 30c
1½ lb ..... 31c 2 lb ... " 29c
3 lb and larger ..... " 26c

CORD.

Picture
White Wire (new list) ..... 85&10%
Sash.
Monarch Braided Flax ... per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone ..... 8-32 in. " 29c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&20%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " $0

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine .... per dos. $30 00

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant..... 33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 93
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List.. 60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Patter.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet.....50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size.....5-lb. pkgs. ½ kegs. kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70%
Kearney & Foot.....75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine.....60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2 30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20

GAUGES

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single..... 90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....50&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 39
Peck's Adjustable..... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....50&10%
Drifting Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eaves Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....60-10&5%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " $0 85@1 10
Germantown.....50%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Lch.. doz. $2.50 2.90 4.00
Hinges only... " 1.90 2.20
Latches only . " .70 .75
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " " prs. 9 00
Spring.
American.....20%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $5 00
Oxford.....20%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
⅝ in.....per 100 lbs. $6 75
½ in..... " " 7 75
⅜ in..... " " 9 75

HOES

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Bee.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle. per doz. $7 00
Chain.
Inch..... 1/4&5/16 3/8 7/16 1/2
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron . . . . per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.... . . ..25%
Wrought.....20%
Corn.
Common, unpolished, per doz. $1 50
Little Giant..... " 3 25
Gate.
. See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50% @50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring .....per lb. 5½c

HOOPS, TUB.

Elastic . . . per case of 2 doz.... $1 50

HOSE, GARDEN.

				Coupled, per ft.
Heron, 3 ply-½" guar. press				55 lbs. 7½c
Crane.. "	"	"	75 "	8½c
Falcon "	"	"	95 "	9½c
Eagle "	"	"	120 "	10½c
Condor "	"	"	150 "	11½c
High Test "	"	"	200 "	12½c

COTTON COV. RUBBER HOSE.

High Grade-½"-guar. press.		400 lbs.	11½
Special "	"	" 300 "	9½c
Leader "	"	" 100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.....$3.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 50 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's.
No..... 1 63 200 400
Per doz.....$0.40 .75 .75 1.75
Nos..... 200s 40s 3s 4s
Per doz..... $0.85 .50 1.25 1.25
Nos..... A AB P
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals.—First column.

IRONS.

Curling.
X.....per doz. $0 40
Y..... " 50
Z..... " 55
Jewel..... " 85
Imperial..... " 1 00
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 95
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest . . " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Oliver,
Nos..... 0 00
Each.....$0.00 $0.80
Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Boot Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander's..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 90
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2½-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...dos. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
60-ft. Cotton..... " 1 15
60-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate. 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.	$9 00	
Excelsior..... "	2 00	
Handy..... "	2 00	
Little Giant..... "	3 00	
Pony, Pomeroy..... "	7 20	
Washing.		
Winner.....per doz.	54 00	
Keystone..... "	54 00	
U. S. Steel..... "	60 00	
Advance, f.o.b.Chicago "	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
Wood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	¼ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....40-12½&2½%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6 00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75
Philadelphia.
All Styles, except A & E, 60, 10&10%
Style A.....50&10%
Style E, High Wheel....60, 10&10%
Drexels.....40%
All Day .....Net Price

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 28
Carload Lots..... 2 18
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf ..... per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ¼ 5/16 ⅜ 7/16 ½ ⅝
lb 9½c 8c 6½c 5½c 5½c 4½c
Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin . . . .per dos. $2 00@$2 25
Machine.
Common.....per doz. $0 53
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn . . 4.00 4.50 5.50 6.00
Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 05
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
E. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Rosi..... 6 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 6 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel,
Inches..... 6 8 10 12
Per doz..... $2.00 2.60 2.95 3.75
Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 82
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.
Gal. Steel Charcoal
L. C. L. to Dealers:—
Eastern .....70&10%...50&10&2½%
Pittsburgh..75&10&5%.....60%
Central.....75&10%.....60%
Northwestern..75&7½%.....60%
Western .....70&12½% .....50&12½%
Tennessee ....70&10% .....50&12½%
Southern.....70% .....50&12½%
Southwestern ....70%.....50&5%
Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.
Lead.
Full coils .....per lb. 7½c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished.....	14½c	15½c	18 c
Planished.....	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth.....	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c
Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
Blue Steel:	—Cents—			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Fin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.
Wrought Iron Gas Pipe.
¼@½-in., black.....discount, 60%
¾@1-in., black..... " 60,10&5%
1¼-in. to 6-in, black... " 70%
7-in. to 12-in., black... " 62½%
¼@½-in., galvanized.... " 42%
¾@1-in., galvanized.... " 50%
1¼-in. to 6-in. galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—Ins..	4½	6	8	10
Per doz.....	$2.75	3.35	4.15	5.1[illegible]

Button's Pattern.

Inches.....	4½	6	8	10
Per doz.....	$2.25	2.75	3.25	4.2[illegible]

Cutting.
Bernard's.....30%
Lodi.....50%
End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....50%
Fencing.
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches..	7	8	10	12
Per doz.....	$3.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron 25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'l " 80
Nickel Plated, coil hand'l " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
A-B Oil Metal Polish, 4-oz. bottles, 3 doz. case, per gr. $9 00
1-gal. can..... 50
White Silk, half pints, per doz, $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
A-B Polishes.
Liquid Stove Polish.
3 doz. in case.....$2 25
6 " " .....gr., 9 00
Fireproof Stove Polish, 3 and 6 doz. in case.....gr., 12 00
Liquid Waterproof Stove Polish, 10-oz. cans, per gro., 12 00
Oil Paste Polish.
6-oz. cans, 3 doz. case..... 2 25
1-lb. " 3 " " 3 75
5-lb. " per can..... 50
Dry Powdered Stove Polish.
5-lb. box..... 75
100-lb. bbls.....per lb. 12
Powder Polish. 3 doz. 6 doz. 12 doz.
$2.25 $4.50 $9 00
Water Paste Stove Polish, ½-lb. boxes, 3 doz. case..per gro., 12 00
Black Eagle, 1-lb. cans, pr gr, $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans .... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 30
[illegible]-qt..... " 3 75

POTS, FIRE.

Dayton & Lambert's,each,$4 75@6 25
Gate City.....each, 6 25
Gem.....each,$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Vater's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in..... " 1 75
Wood Wheel, 6-in. pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz.$14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 [illegible]
Machine.....per lb . 1[illegible]
Saddlers'.
Common ... .per doz 80c@70[illegible]
Good..... " 72c@8[illegible]

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 8[illegible]

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

Tuttle & Bailey Registers and Borders
(All Sizes)
Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Tuttle & Bailey
Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 28x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper.....	2½ in.	3in.
Per doz.....	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.....	85	95
Nickel plated.....	1 25	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils. . " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality .....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb.15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....[illegible]
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....35%
Jackson's.....35%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 [illegible]
Disston's .....[illegible]%
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 7[illegible]
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . per doz . 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....30&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial

Nos ..	1	2	3	4	5	6
Per doz.	18c	20c	20c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per dos. $0 33
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per dos. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per dos $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 20
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond..... per dos $1 00
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.00 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,dos.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list.....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c
Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz .... light, 90c; heavy, $1 35
Torrey's.....per dos. $1 35
Warner's No..... 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Miter.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per dos. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 00
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb ...9½@9¾c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 50
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per dos.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6¾
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 25
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per dos. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per dos. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 80

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per dos. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker..... " " 75
Delusion.....per dos. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood				Ex.
Nos.	0	2	1	large
Per doz.	$5.00	6.00	7.00	9.50
Dowell.				
Per doz.	5.35	6.35	7.00	9.50
Cedar.				
Per doz.	6.10	7.10	7.90	10.80
Indurated.				
Per doz.	8.55	9.45	10.80	13.50
Galvanized.				
No.	1	2	3	
Per doz.	$6.00	6.75	7.75	

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones....25c
4 " " " " " 25c
India Hemp, ¼-lb. balls 19c
" " ½-lb. " 18c
" " ¼-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.

Nos.	9	12	15
Soft.....per lb	26½	26	25
Med..... "	26½	26	25
Hard..... "	27	26½	26

Staging, ¼-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-p y "B" in hanks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Folder or Lath.
130 strand.....6½c
200 strand.....—

VISES.

Phoenix.....30%
Phoenix Oval Slide.

Inches.....	2½	3	3½	4½
Each.....	$1.25	1.50	1.85	2.75

Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots,
Tinned..... .....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:

In.	½	⅝	¾	⅞	1	1¼	1½
	9c	6½c	5c	4½c	4½c	4½c	3½c

Wrought steel in 5-lb. boxes, per lb.:

In.	½	⅝	¾	⅞	1	1¼	1½
	10c	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10¾
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $3 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b. Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 39 00
Klondike Steel Tray.. " 28 00

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 39 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed.	Painted.	Galv'd
Carloads . . per 100 lbs.	$2.33	$2.63
Less than car "	2.43	2.73

Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80% @80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%

WRINGERS.

No. 22, Guarantee....per dos. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 23 50

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Paxton & Gallagher Co. 8
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Weiss, H. & Co. 58
Weller Pattern Co. 50
Wheeling Corrugating Co. 58
Whitacre, J. R. Mfg. Co. 68
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White Lily Mfg. Co. 61
Youngstown Furnace & Supply Co. 11

CLASSIFIED LIST.

Acetylene Generators

Ideal Epworth Acetylene Co., Waterloo, Iowa and Johnstown, Penna

Augers—Post Hole

Iwan Bros., Streator, Ill

Boilers—Hot Water Combination

Stolz Mfg. Co., Frank D., Chicago, Ill

Boilers—Steam

Boynton Furnace Co., Chicago, Ill
Magee Furnace Co., Chicago, Ill

Boiler Handles

Berger Bros. Co., Philadelphia, Pa

Belts

Columbus Bolt Wks., Columbus, O

Boxes—Hardware

Green Co., A. H., New York

Brakes—Cornice

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati

Brass and Copper

Hungerford, U. T., Brass & Copper Co. New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Cans

Stuber & Kuck, Peoria, Ill

Carpenters' Tools

Baker-McMillen Co., Akron, O
Disston & Sons Henry, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill
North Bros. Mfg. Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y
Simmons Hdw. Co., St. Louis, Mo
Smith & Hemenway Co., New York, N.Y

Carriage Forgings

Columbus Bolt Works, Columbus, O

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Keighley Met. Ceiling Co., Pittsburg, Pa
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O
Wheeling Corrugating Co., Wheeling, W. Va

Cement—Plumbers

Obermayer, Co., S. Cincinnati, O

Cement—Roofing

Auld & Conger Co., Cleveland, O
Conners, Wm. Paint Mfg. Co., Troy, N.Y

Chains—Jack and Safety

Hungerford, U. T. Brass & Copper Co., New York

Chimney Tops

Iwan Bros., Streator, Ill
Powers & Williams, Streator, Ill

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

American Rolling Mill Co., Middleton, Ohio
Berger Mfg. Co., Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Delphos Mfg. Co. Delphos, Ohio
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Schoedinger, F. O., Columbus, Ohio

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Core Compound

Obermayer Co., S., Cincinnati, O

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co. Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co. Canton, O
Schoedinger F. O., Columbus, O

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dries & Krump Mfg. Co., Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N. Y.
Robinson, Mfg. Co., J. M., Cincinnati, O

Counters

Heller & Co., W. B. Montpelier, O

Couplings—Solderless

Modern Improvements Mfg. Co. Brooklyn, N. Y.

Crimping Machines

Droescher, S. R., New York, N. Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Cutlery

Smith & Hemingway Co., New York, N.Y

Cut Offs—Rain Water

Huenefeld Co., E. H. Cincinnati, O
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Sullivan-Geiger Co., The Indianapolis, Ind.

Dampers

Howes Co., S. M. Boston, Mass

Door Hangers

Griffin Mfg. Co., Erie, Pa
Richards Mfg. Co., Aurora, Ill
Safety Door Hanger Co., Ashland, O

Door Holders

Caldwell Mfg. Co., Rochester, N. Y

Eaves Trough

Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Delphos Mfg. Co., Delphos, Ohio
Eller Mfg. Co., Canton, O
La Crosse Steel Roof Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Whitacre, J. E. Mfg. Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Eaves Trough Hangers

Canton Mfg. Co., Canton, Ohio

Elbows—Conductor Pipe

Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand. Cincinnati, O.
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugat'g Co., Wheeling, W. Va

Elevators

Kimball Bros. Co. Council Bluffs, Ia

Enamel Formulas

Pell, John, Columbus, O

Enameled Ware

Lalance & Grosjean Mfg. Co., Chicago, Ill
Star Enameling & Stamping Co., Pittsburgh, Pa

Fencing—Wire

American Steel & Wire Co., Chicago, Il
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks, Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Fixtures—Store

Warren Mfg. Co., J. ., Chicago, Ill

Food Choppers

Enterprise Mfg. Co. of Pa., Philadelphia, Pa.

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Furnace Cement

Connors Paint Mfg. Co., Wm., St. Louis, Mo

Furnaces—Hot Air

American Furnace Co., St. Louis, Mo
Boynton Furnace Co., Chicago, Ill
Excelsior Steel Furnace Co., Chicago, Ill
Floyd-Wells Co., The. Chicago, Ill and Royersford, Pa
Fox Furnace Co., Elyria, Ohio
Germer Stove Co., Erie, Pa
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Kelsey Heating Co., Syracuse, N Y
Magee Furnace Co., Chicago, Ill
March-Brownback Stove Co., Pottstown, Pa
May-Fieberger Co., The Akron, Ohio
Monroe Fdy. & Furn. Co., Monroe, Mich
Ralt & Co., Walter S. Chicago, Ill
Schwab, R. J. & Sons Co., Milwaukee, Wis
Smith Co., Chas., Chicago, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Tubular Heating & Ventilating Co., Philadelphia, Pa
XXth Century Heat. & Vent. Co., Akron, Ohio
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Soldering

Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Furnace Pipe and Fittings

Excelsior Steel Furnace Co., Chicago, Ill
Green Fdy. & Furn. Wks., Des Moines, Ia
Meyer & Bro., Co., F. Peoria, Ill
Michigan Safety Furnace Pipe Co., Detroit, Mich

Gas Stoves

American Beauty Stove Co., Erie, Pa
Economy Stove Co., Cleveland, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

Generators—Acetylene

Ideal Epworth Acetylene Co., Waterloo, Iowa, & Johnstown, Penn

Grain Bins

Denning Wire & Fence Co., Cedar Rapids, Ia

Grindstones

Richards Mfg. Co., Aurora, Ill

Hangers—Garment

Pullman Mfg. Co. Rochester, N.Y

Hardware Delivery Wagons

Sycamore Wagon Wks., Sycamore, Ill

Hardware Jobbers

Clark, Quien & Morse. Peoria, Il
Paxton & Gallagher Co., Omaha, Neb
Simmons Hardware Co., St. Louis Mo

Hardware Specialties

Caldwell Mfg. Co., Rochester, N. Y
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Paxton & Gallagher Co., Omaha, Neb
Pullman Mfg. Co., Rochester, N. Y
Richards Mfg. Co., Aurora Ill
Simmons Hdw. Co., St. Louis, Mo
Smith & Hemenway Co., New York, N. Y

Heaters—Hot Water

Detroit Heating & Lighting Co., Detroit, Mich

Hinges

Griffin Mfg. Co., Erie, Pa
Lawson Mfg. Co., Chicago, Ill

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Il

Hones
Droescher, S. R., New York, N. Y

Horse Nails
Standard Horse Nail Co., New Brighton, Penna

Horse Shoes
American Steel & Wire Co., Chicago Ill

Ice Cream Freezers
North Bros. Mfg. Co., Philadelphia, Pa

Iron Enamel
A-B Polish Co., Chicago, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Kitchen Utensils
Avery Stamping Co. Cleveland, O
Lalance & Grosjean Mfg. Co., Chicago, Ill
Star Enameling and Stamping Co., Pittsburgh, Pa

Lard Presses
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Lawn Fence
Denning Wire & Fence Co., Cedar Rapids, Ia

Lawn Mowers
Philadelphia Lawn Mower Co., Philadelphia, Pa

Levels
Baker-McMillen Co., Akron, O

Lighting
Ideal Epworth Acetylene Co. Waterloo, Iowa and Johnstown, Penna

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich

Lightning Rod
Electra Lightning Rod Co. Cresco, Ia
Foy, Edw. A. & Co., Cincinnati, O
Maher & Son Lightning Rod Co., Preston, Ia

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
A-B Polish Co., Chicago, Ill
Nickle Plate Stove Polish Co., Chicago, Ill

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Cortright Metal Roofing Co., Philadelphia and Chicago
Nat'l Sheet Metal Roofing Co., Jersey City, N. J

Mica
Munsell & Co., Eugene Chicago, Ill

Milters
Whitacre, J. E. Mfg. Co., Rockford, Ill

Nails and Tacks—Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y
Hussey & Co., C. G., Pittsburg, Pa

Nuts
Columbus Bolt Works, Columbus, O

Paints and Paint Specialties
Buckeye Paint & Varn Co., Toledo, O
Connors, Wm., Paint Mfg. Co., Troy, N. Y
Dixon, Jos. Crucible Co., Jersey City, N.J

Pencils
Dixon, Jos. Crucible Co., Jersey City N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Pipe—Furnace
Excelsior Steel Furn. Co., Chicago, Ill
Michigan Safety Furnace Pipe Co., The Detroit, Mich

Plungers
Berger Bros. Co., Philadelphia Pa

Pumps
Star Bucket Pump Co., St. Louis, Mo

Punches
Armstrong-Blum Mfg. Co., Chicago, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N.Y
Robinson, Mfg. Co., J. M., Cincinnati, O

Putty—Stove
Connors Wm. Paint Mfg. Co., Troy, N.Y

Radiators—Stove Pipe
Rochester Radiator Co., Rochester, N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

Razors
Droescher, S. R., New York, N. Y
Shrp-Shavr Razor Co., New York, N Y
Smith & Hemenway Co., New York, N.Y
Simmons Hardware Co., St. Louis, Mo

Registers
Ferrosteel Co., Cleveland, O
Henry Souehle Co., Cleveland, O
Independent Register & Mfg. Co., Cleveland, Ohio
Schwab & Sons Co., Milwaukee, Wis
Tuttle & Bailey Mfg. Co., New York, N.Y
U. S. Register Co., Battle Creek, Mich

Rivets
Columbus Bolt Works, Columbus, O
Hungerford, U.T., Brass & Copper Co., New York, N.Y

Roasters
American Rolling Mill Co. Middleton, Ohio
Wheeling Corrugating Co., Wheeling, W. Va

Roofers' Supplies
Auld & Conger Co., Cleveland, O

Roofing—Iron and Steel
American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Delphos Mfg. Co. Delphos, Ohio
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Tanner & Co., Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Roofing Cement
Auld & Conger Co., Cleveland, O
Connors Paint Co., The Wm., Troy, N.Y

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N.J

Rules
Lufkin Rule Co., Saginaw, Mich

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Sausage Stuffers
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Saw Sets and Saws
Disston, Henry & Sons, Philadelphia, Pa
Smith & Hemenway Co., New York, N.Y

Schools—Correspondence
American School of Correspodence, Chicago, Ill

Schools—For Sheet Metal Pattern Drafting
Gray's School, New York, N. Y

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks
Pullman Mfg. Co., Rochester, N. Y

Screws
Columbus Bolt Works, Columbus, O

Screw Drivers
North Bros. Mfg. Co., Philadelphia, Pa

Seamless Tubing—Brass & Copper
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Shears
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson, Mfg Co., J. M., Cincinnati, O

Sheets—Black and Galvanized
American Rolling Mills Co., Middletown, O
American Sheet & Tin Plate Co. Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Griffiths Charcoal Iron Mills, Washington, Pa
Tanner & Co. Indianapolis, Ind
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Ingot Iron
American Rolling Mills Co. Middleton, Ohio

Sheets—Planished
American Sheet & Tin Plate Co., Pittsburgh, Pa
Follansbee Bros., Pittsburg, Pa
Griffiths Charcoal Iron Mills, Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
American Sheet & Tin Plate Co., Pittsburgh, Pa.
American Steel & Wire Co., Chicago, Ill
Follansbee Bros. Co., Pittsburgh, Pa
Griffiths Charcoal Iron Mills, Philadelphia, Pa
Tanner & Co., Indianapolis, Ind

Sheet Metal Ornaments
Berger Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Kelsey Metal Ceiling Co., Pittsburg, Pa
La Cross Steel Roofing and Corrugating Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Schoedinger, F. O., Columbus, O

Shelf Boxes
Green & Co., A. H., New York, N. Y
Heller & Co., W. B. Montpelier O

Shelving
Heller & Co., W. B. Montpelier, O
Warren Mfg. Co., J. D., Chicago, Ill

Shovels
Avery Stamping Co., Cleveland, O

Siding
Foster, Wm. & Sons Co., Springfield, Ill
Milwaukee Corrugating Co., Milwaukee, Wis

Sifters
Stuber & Kuck. Peoria, Ill

Skylights
Berger Mfg. Co., Canton, O
Burt Mfg. Co., Akron, O
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Powers & Williams, Streator Ill

Skylight Glazing
Weiss, H. & Co., New York, N.Y

Slate Roofing
Auld & Conger Co., Cleveland, O

Slating Nails
Hussey & Co., C. G., Pittsburg, Pa

Soldering Fluxes
Ruby Chemical Co., Johnston, Ohio

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O

Statuary
Gerock Bros. Mfg. Co., St. Louis, Mo

Steel
American Steel & Wire Co., Chicago, Ill

Stoves and Ranges
Allen Mfg. Co., Nashville, Tenn
Born Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago, Ill
Economy Stove Co., Cleveland O
Floyd-Wells Co., The Chicago, Ill. & Royersford, Pa
Foster Stove Co., The, Ironton O
Fox Furnace Co., Elyria Ohio
Germer Stove Co., Erie, Pa
Landay Steel Range Co., St. Louis, Mo
Ohio Stove Co., Portsmouth, O
Paxton & Vulcanite, Omaha, Neb
Quality Stove & Range Co., Belleville, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
White Stove Co., Thomas, Quincy, Ill

Stove Bass
Stuber & Kuck. Peoria, Ill

Stove Patterns
Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy Ill
Vedder Pattern Works. Troy, Y
Weller Pattern Co. Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
A-B Polish Co., Chicago, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty
Connors Paint Mfg. Co., Wm., St. Louis, Mo
Dixon, Jos. Crucible Co., Jersey City, N. J.

Stove Repairs
American Stove Repair Works, St. Paul, Minn
Brauer, A. G. Supply Co., St. Louis Mo
Manufacturers Stove Repair Co., Chicago, Ill
U. S. Stove Repair Co., Minneapolis, Minn

Store Fixtures
Heller & Co., W. B. Montpelier, O

Sugar Kettles
Sperry, D. R. Co., Batavia Ill

Supplies—Foundry
Obermayer Co., S., Cincinnati, O

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tacks
Hungerford, U. T., Brass & Copper Wks New York, N. Y

Tapes
Lufkin Rule Co., Saginaw, Mich

Technologist
Hooper, C. N. Dubuque, Iowa

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces
Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Sycamore, Ill

Tinners' Tools
Armstrong, Blum Mfg. Co., Chicago, Ill
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge, Mass
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati, O
Smith & Hemenway Co., New York N.Y
Weiss & Co., H. New York, N. Y

Tinplate
American Sheet & Tin Plate Co., Pittsburg, Pa
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh Pa
Merchant & Evans Co., Philadelphia Pa
Tanner & Co. Indianapolis, Ind
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings
Berger Bros. Co., Philadelphia, Pa

Tools, Etc.
North Bros Mfg. Co. Philadelphia, Pa
Simmons Hardware Co., St. Louis, Mo

Tools—See Carpenters' Tools

Tools—Linemen's
Smith & Hemenway, New York, N.Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper
Hungerford, U. T., Brass & Copper Co. New York, N. Y

Tubing—Heavy Tin
Dieckmann, Ferdinand, Cincinnati, O

Ventilators
Berger Mfg. Co., Canton, Ohio
Burt Mfg. Co., Akron Ohio
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Uno Ventilator Co. Troy, N.Y
Independent Register & Mfg. Co., Cleveland, Ohio
Iwan Mfg. Co., Streator, Ill
Merchant & Evans Co., Philadelphia
Powers & Williams, Streator, Ill
Pullman Mfg. Co., Rochester, N. Y
Uno Ventilator Co., Lynn, Mass

Wagon Stoves
Shirley, W. H. Galveston, Ind

Wagons
Sycamore Wagon Works, Sycamore, Ill

Washers
Columbus Bolt Works., Columbus, O

Washing Machines
White Lily Mfg. Co., Davenport, Ia

Wire
American Steel & Wire Co., Chicago, Ill

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wire Stretchers
Smith & Co., C. F. De Kalb, Ill

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

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For Sale—Well established hardware, tinshop and implement business at invoice price. Will invoice about $5,000. Must sell on account of poor health. Business in good condition and clean up-to-date stock. A splendid opportunity. Address L-40, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

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For Sale—Well established hardware and furniture store doing good business in best farming section of southwest Iowa. Stock and fixtures about $6,000. Two-story 24 by 80 brick building, $3,500. Vacant lot and wareroom. Only hardware and furniture in town. No trade. Reason for selling, have western fever. Address C. E. Bodley, Weldon, Iowa. 15-3t

Exchange or Buy—Will trade my 480 acres rich, level, timber bottom farm in Woodruff Co., Ark. Timber will cut 5,000 ft. to acre. White oak, gum, hickory. One mile of railroad; 3½ to good town; land clear; abstract. Cash price $15 an acre. Now I will trade this land or will buy $4,000 to $5,000 stock on $1,000 a year payments and give mortgage on above tract as security. Don't answer this unless you want to do business and have got a clean stock in town not over 2,000. Address John Akens, Toledo, Illinois, Box 34. 14-3t

For Sale—Well established hardware business and tinshop on the north side of Chicago. Clean stock. Will invoice about $7,500. Good reasons for selling. For full particulars address L-29, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 13-3t

For Sale—75c on the dollar will buy one of the finest stocks of General Hardware with Warren Fixtures, including Stoves, Paints, Oils, Glass, etc., in Northern Illinois. This stock will invoice about $10,000 and is a fine proposition for a Hardware Man and will stand close investigation. This city has a population of ten thousand inhabitants and is one of the most beautiful cities in the state for its size. This is a splendid business opportunity. No trade. Write for particulars. Address L-22, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. ufn

TINNER'S TOOLS.

For Sale—Tinshop, full set of tools, and some stock for $300 cash. Only shop in railroad town of 1,800 inhabitants. Write at once. Address J. A. Phillips, Thayer, Missouri. 16-3t

Wanted—Second-hand tinner's tools and machines in good condition. State price and condition of what you have to offer and give prices. Address Hoover Bros., Milroy, Pennsylvania. 14-3t

HELP WANTED.

Wanted—Two first-class all around tin and sheet iron workers. Must be steady and reliable. Steady work; wages $3.50 per day (10 hours). Address L-41, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

Wanted—First-class, energetic stove salesman on commission basis to sell the greatest specialty line of Steel Ranges made. Our line has more patented features of merit than all other lines combined. Only competent men who are business getters need apply. Applications treated strictly confidential. Some good territory in West and Middle West still open. Address Allen Mfg. Co., Nashville, Tennessee. 16-3t

Wanted—At once, a good plumber and furnace man. One who understands hot water heating. No boozer. Permanent job at good wages. Address A. C. Snyder, York, Nebraska. 16-2t

Wanted—Two first-class tinners accustomed to copper work. Must be neat and experienced mechanics. Steady inside work. Address L-34, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 15-3t

Wanted—First-class salesman to sell our specialty line of patented ranges. Applications treated confidentially. Address Allen Mfg. Co., Nashville, Tennessee. 15-3t

Wanted—Two good tinners at once. Address Mohr Jones Hardware Co., Racine, Wisconsin. 15-3t

Wanted — Young man, married preferred, with a builder's hardware experience. Must be capable and be able to take off plans and be good salesman. Give references. Address E. L. Sommers, 7105 So. Chicago Ave., Chicago, Illinois. 14-3t

Wanted—First-class tinner for general jobbing, blow pipe work, furnace work and roofing. One that can take hold and do any kind of work in the sheet metal trade. No specialty men or combination mechanics wanted. Do not answer this ad unless you have had from twelve to fifteen years' experience. Must have good habits. Steady job the year around at good wages. Address Charles Skidd, Kenosha, Wisconsin. 14-3t

Wanted—All around tinner and furnace man. Mostly indoor work. Steady, sober man. Steady work the year around for the right man. Wages $2.75 or $3.00 per day of ten hours. Address Matern's Stove Store, 715 Water St., Sandusky, Ohio. 13-6t

SITUATIONS WANTED.

Wanted—Two first-class tinners for in and outside work, capable of doing any kind of sheet metal work. We have the best shop in the country and the best job for two good men. Wages $3 per day of eight hours. Address Scott Mfg. Co., Robinson, Illinois. 16-3t

Situation Wanted—By young man with 1½ years' experience in plumbing and tinning trade. A position as second man preferred. Address Box 36, Glenburn, North Dakota. 16-3t

Position Wanted—Retail hardware merchant who has made a specialty of stove salesmanship with decided success wishes a position on the road with first-class line of stoves and ranges. Address L-39, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-3t

Position Wanted—By first-class tinner; strictly sober and reliable. Address L-37, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 15-2t

Position Wanted—By young man with one year's good experience. Can do most all the tin work. No bad habits. Address Walter Ebert, Truman, Minnesota. 14-3t

Situation Wanted—By all around tinner at in and outside furnace and job work. Address L-33, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 14-3t

Situation Wanted—By tinner and clerk of experience. Sober, steady, reliable and honest. Country town. Reasonable wages if steady. Address John A. Myers, 270 W. Marietta St., Decatur, Illinois. 14-3t

Situation Wanted—By good tinner and furnace workman. Sober, steady and reliable. Position wanted with hardware man who appreciates good workman and has steady job the year around in country town in Illinois of 1,000 or 2,000 inhabitants. State wages and address Tinner, Box 317, Monticello, Indiana. 14-3t

SPECIAL NOTICES.

Position Wanted.

Traveling Salesman with experience and ability wants position with hardware manufacturer. At present covering eastern territory. Best of references. Address "B-30," care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-7t

A Business Opportunity

FOR SALE—A clean, well-assorted stock of Hardware and Buggies, with Plumbing and Sheet Metal Shop, in one of the best towns in prosperous Oklahoma. Stock $15,000, sales $55,000, good profits, business improving, town growing, 20,000 population and only three hardware stores, good location and moderate rent. The best business opportunity in the United States to-day. Address "Oklahoma," care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 16-2t

WANTED SALESMAN

To sell a very low priced line of cannon and laundry stoves on a commission basis. Address Box 14, Station D, Cleveland, Ohio. 13-4t

Hardware and Implement Salesmen

who want a good side line. No samples to carry. Good commission. Address Will A. Eshbach, 147 N. Delaware St., Indianapolis, Ind. 14-4t

For Sale or Trade

In Oregon Real Estate

Oldest Hardware and Machinery stand. No stock. Brick building; best location. Only one competitor. In Southern Minnesota town. Address R. Reierson, 182 Morrison Portland, Oregon. 10-9t

WANTED SALESMEN

Visiting stove trade to handle household specialty as a side line. Extensively advertised in largest magazines. Easy seller; immense sales; big profits. In writing state line you are selling and territory you cover. Address C. E. Swartzbaugh, 1336 West Bancroft St., Toledo, Ohio. 14-5t

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WANTED—Agents to solicit subscriptions to the THE AMERICAN ARTISAN in every state in the Union. Can be handled as a side line by agents who sell stoves and sheet metal wares. Write for agent's terms and state what territory you can cover.

SUBSCRIBERS who can spare a few hours a week can make money on the side by soliciting subscriptions in their vicinity or among their fellow workers. Write for particulars.

SAMPLE COPIES FREE UPON REQUEST

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355 Dearborn St., Chicago

Residence of Mr. C. P. Taft, brother of Wm. H. Taft.

For Good Ventilation and Light

The attic of the average house is hot and dark. It can be easily changed into a pleasant habitable room by the use of the Burt Ventilator.

The residence of Mr. C. P. Taft, brother of the presidential candidate was remodeled and furnished with

Burt Ventilators

which has done wonders in providing fresh air and light to the darker rooms of the house.

The following letter is one of the best testimonials of Burt Ventilators we have ever received.

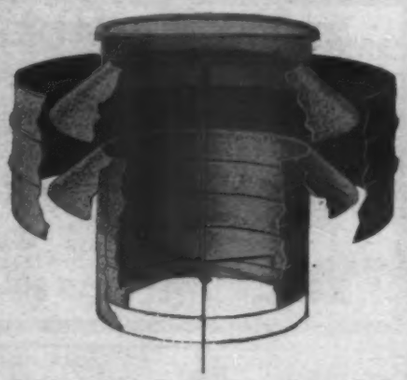
"In reply to yours of recent date, will say that these ventilators are to go on Mr. C. P. Taft's residence, Cincinnati, Ohio. Elzner and Anderson are the architects and they stated positively that nothing but the Burt Ventilators would be allowed to go on, so you see that speaks well for you."

Burt Ventilators have an extraordinary capacity for properly ventilating any building. They are made with metal or sky light glass tops with patented sliding sleeve dampers adjusted to any degree, are storm and dust proof at all times whether open or closed, **and never shut out the light.** Burt Ventilators are the standard ventilators of America.

Send for our 96-page catalog, giving fine illustrations of mills, shops, factories and residences where Burt Ventilators are in successful use.

The Burt Mfg. Co., 650 Main St., Akron, Ohio.

Geo. W. Reed & Co., Montreal, Sole Manufacturers of Burt Ventilators for Canada.



Notice Sliding Sleeve Damper. (Patented.)

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WANTED

At once, experienced Salesmen in all states east of the Mississippi River to sell a full line of Standard Tinware, Cream Separators, Galvanized Goods and Hardware Specialties. Liberal commissions. Old established business. Address Lawrence-Bostwick Mfg. Co., Ltd., Phelps, New York. 15-4t

STOVE SALESMAN WANTED

First-class, energetic. For one of the largest and best lines in this country. We have several territories open. A good opportunity for the right man. Only competent men who are business getters need apply. Address B-27, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 14-4t

WANTED

By Salesman calling on the hardware and housefurnishing trade in Texas, one or two small lines of everyday sellers, straight commission. Mail catalogues and address Box 927, Dallas, Texas. 15-3t

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Wanted to handle a line of high grade metal goods. For first-class men we have a good opening. None but high class salesmen need apply. Lock box 1048, Rochester, New York. 15-4t

FOR SALE

One of the best retail hardware stores in Iowa. Stock, fixtures and real estate connected with same. Property will invoice from $20,000 to $25,000. Can reduce if desired. Annual sales over $50,000. Will sell at once. Address B-28, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 15-

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Vitreous Enameling TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

THE IDEAL WAGON STOVE for R. F. D. MILK DELIVERY

and other wagons, and small rooms, weight 7 lbs.; 7x10 inches, malleable castings, fuel coal or wood, a powerful heater. Retails for $2.50, in lots of half dozen or more. A liberal discount. Sample $2.50. Prompt shipments.

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Will you accept this business book if we send it free?

Sign and mail the coupon below. Send no money! Take no risk! One hundred and twelve of the world's master business men have written ten books—2,193 pages—1,497 vital business secrets. In them is the best of all that they know about

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A booklet has been published describing, explaining, picturing the work. Pages 2 and 3 tell about managing businesses great and small; pages 4 and 5 deal with credits, collections and with rock-bottom purchasing; pages 6 and 7 with handling and training men; pages 7 to 12 with salesmanship, with advertising, with the marketing of goods through salesmen, dealers and by mail; pages 12 to 15 with the great problem of securing the highest market price for your services—no matter what your line; and the last page tells how you may get a complete set—bound in handsome half morocco, contents in colors—for less than your daily smoke or shave, almost as little as your daily newspaper.

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Made with Metal and Glass Tops and with and without Automatic closing device.
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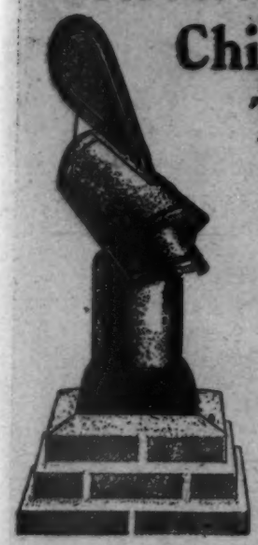

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You need it for some of your customers' chimneys.

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Iron mountings only or complete with cover and vane.

Double the sale and triple the efficiency of smoke stacks.

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Ask us for prices on skylight glass and metallic skylights.

Uno Revolving Ventilators

A sure cure for smoky chimneys, the best for ventilation.

4" to 30"

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Full Assortment in Stock Ready for Immediate Shipment.

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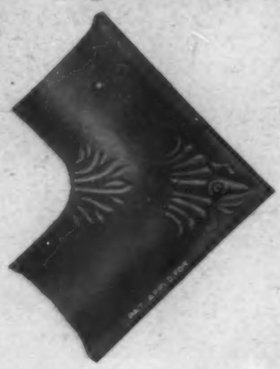

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Absolutely Perfect.

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All Roll Roofings Resquared and Double Cross Locked.

DELPHOS Galvanized Eaves Trough, Conductor Pipe, Elbows, Etc. Roofing Plates (All grades).

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Terne Plates, Long Terne Sheets, and Black Sheets, all from our famous charcoal iron base.

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14 x 20 TERNE PLATES

For Fire Doors and Shutters

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A superior article. Does away with weak, flimsy cut-offs and expensive underground filters which collect rubbish. Best and most durable on the market. Keeps all rubbish from entering the cistern. Purifies the water. Fully Guaranteed. A trial order solicited.

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Can you lay out any pattern?

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MANUFACTURERS OF

EAVES TROUGH
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Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

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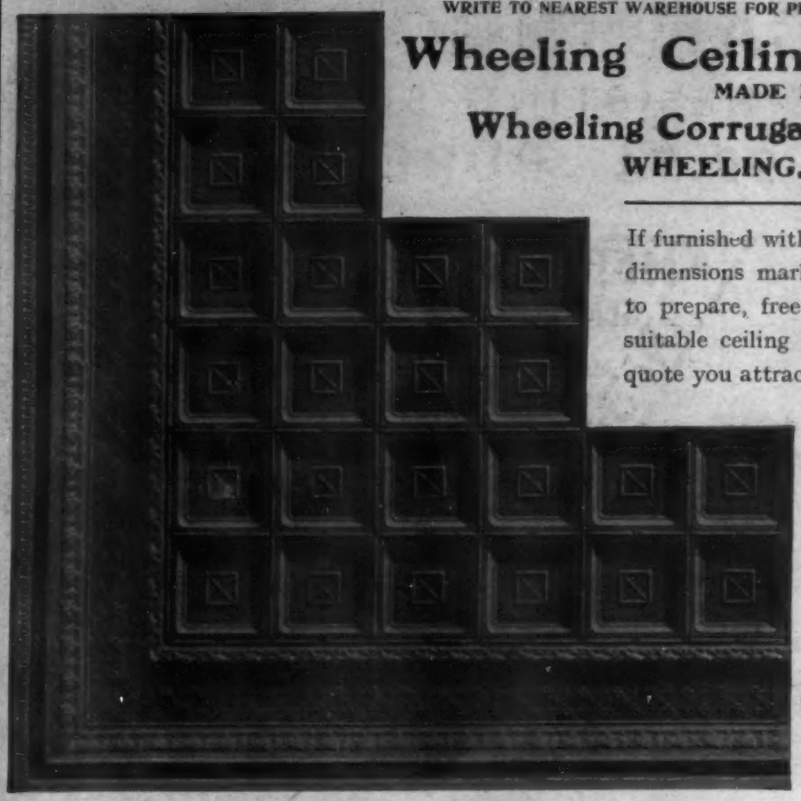
WRITE TO NEAREST WAREHOUSE FOR PRICES. IT PAYS TO ASK QUESTIONS



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Wheeling Ceilings—Fireproof

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Wheeling Corrugating Company

WHEELING, W. VA.

If furnished with a diagram showing a plan with dimensions marked thereon, we will be pleased to prepare, free of cost, a drawing showing a suitable ceiling applied to your room, and will quote you attractive prices.

PROFITABLE
INDOOR WORK
FOR
SHEET METAL
WORKERS
DURING
INCLEMENT
WEATHER

Cheer Up!

Don't lose your front hair worrying about the ceiling business you might have had.

This time
Get Started RIGHT!

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The Berger NEW STEEL CEILING CATALOG

Get the Agency for Berger's "CLASSIK,"—"Get **Busy**,"—and **Get the Business!**
Others are doing it, **YOU** can do it. Write **TODAY** for Catalog D8 and Details.

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New York, Boston, Philadelphia, Chicago, St. Louis, Minneapolis,
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AMERICAN INGOT IRON

RUST RESISTING SHEETS

99.94% PURE

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Write for
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Purest Iron Made In
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Accelerated Acid Tests
Demonstrate Its
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THE AMERICAN ROLLING MILL CO.

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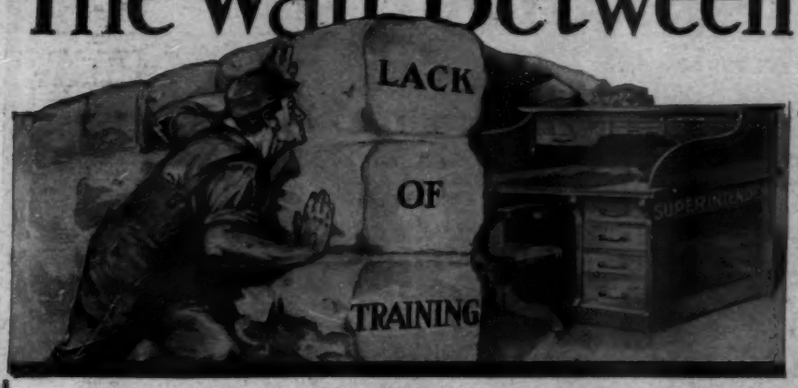

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Don't let that wall stop **you.** There's a way over it—**Learn More.**

You **must** have **training** now-a-days. You can't afford to guess—you must **know. Special training** fits you for big things, gives you the best chances, insures you a **lifetime** hold on a big, well-paid job.

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METAL WORKERS—LEARN MORE

Are you a Sheet Metal Worker, Hardware Man, Roofer, Contractor, Cornice Worker, Tinsmith, Plumber, Heating and Ventilating Engineer, or Mechanical Engineer who wishes to qualify for a lucrative position and cannot do so for lack of training? If you are, let us help you. The **American School of Correspondence** will give you just the special training which you need. Our courses in sheet metal work, roofing, cornice work, tinsmithing, plumbing, heating and ventilation, and mechanical engineering have been written especially for Home Study by practical men and are as complete and practical as they can be made. In addition to giving the most comprehensive instruction in the usual work, we lay particular stress on the **Sheet Metal Pattern Drafting Course,** giving special attention to the design and construction of **Skylights.**

Spare time study will give you that training at home, add to your practical knowledge, fit you to earn **more** and **more** salary—to **be** your best and **do** your best.

The **AMERICAN SCHOOL OF CORRESPONDENCE** has helped 80,000 men to better positions. Its instructors are practical men. Its courses are the most thorough and down-to-mother-earth. Its students are the most successful.

The help, suggestions and advice of the American School—free and freely given—will show you how to get a climbing hold on **the wall between you and success.** Simply send us the coupon—and do it to-day. No obligation on your part. We employ no agents.

WE HELP MEN HELP THEMSELVES.

AMERICAN SCHOOL OF CORRESPONDENCE, CHICAGO, U. S. A.

THE ELLER TRADE-MARK
is a little thing to look for, but a big thing to find; it appears on all genuine
ART METAL CEILINGS
Tin and Terne Plate — Steel Roofing
Eaves Trough, Conductor Pipe — Brick and Stone Siding
Elbows and Shoes — Cornice and Skylight
ELLER MFG. CO. : : CANTON, OHIO

Lock Joint
Metal Ceilings

Handsome Panel Effects
Special Designs Submitted on Request
Artistic Combinations
Perfect Joints
Absolutely Dust-Proof

Send for Catalog "D"
S. Keighley Metal Ceiling & Mfg. Co.
Pittsburgh, Pa.
Baltimore New York Washington Boston

SKYLIGHTS
for any purpose. Our new and complete catalogue is now ready for distribution.
THE CANTON ART METAL CO.
CANTON, OHIO

Write for Prices on
Roofing Slate
The Auld & Conger Co.
Manufacturers and Dealers
999 Prospect St., Cleveland, O.

WALTERS'

Shingles that last

Made from Galvanized Tin and Painted Tin
Storm, Rust and Fire Proof
Do you want to increase your business? THIS IS YOUR OPPORTUNITY. Write for catalogue samples and prices.
National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

Buckeye Paints
are unquestionably the best, most durable and economical line of paints manufactured.

Our products are designed to meet the wants of all classes of paint consumers. We guarantee all paints and varnishes bearing our name. Made of the best material obtainable.
Send for Catalogue.
Buckeye Paint & Varnish Co.
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STANDARD HORSE NAIL CO.
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MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

YALE
Russia Finish, oak Lock
Stove Pipe
It is made of a very high grade of uniform color Blue Polished Steel and is coated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by
HEMP & CO.,
2nd & Chouteau Ave.,
ST. LOUIS.
In the event your jobber does not handle this pipe, send your inquiries to us.

WHY IT LEADS!

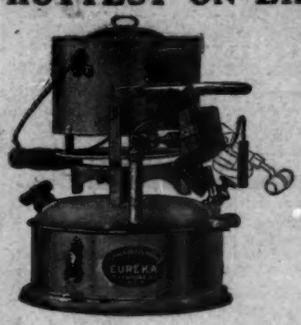
The No. 1 C. & L. Fire Pot produces a hotter flame, using less gasoline than any other make. The burner is capable of every needed adjustment and is the outgrowth of over 20 years' practical manufacturing experience. Heats the heaviest irons in half the time required by other makes at the same time melting a kettle of lead or solder. The No. 1 can be used as a torch or brazing fire. This fire pot affords a "knack in use" made possible only through its perfect construction, simplicity and easy operation.

No. 1 Firepot—$6.00 Net.
Jobbers' supply at factory prices, or we will ship direct if cash accompanies the order.

Booklet Free!

CLAYTON & LAMBERT MFG. CO.
Detroit, Mich., U. S. A.

HOTTEST ON EARTH



Let us prove it.

A trial order will convince you.
No. 6 Eureka, price each, $6.00 net
No. 14 " " " 4.50 "
Jobbers sell at factory price

The TURNER BRASS WORKS
26 Park Avenue, Sycamore Ill., U. S. A.

H. WEISS & CO.

20 CLIFF ST., NEW YORK

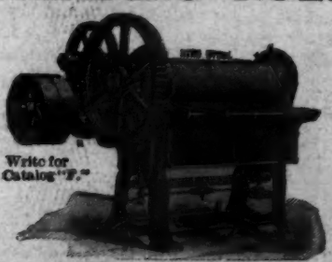
Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools. Cornice Makers Tools. Coppersmiths Tools. Pipe Threading Machines.

Second-Hand Goods Bought, Sold and Exchanged

Slitting Machine for No. 12 Iron

CRIMPING ROLL



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This Improved Crimping Roll will crimp sheets without buckling them. We build a complete line of Shears, Punches and Bending Rolls, all sizes for hand or power drive. BERTSCH & CO., Cambridge City, Ind.

RUBY FLUID

Ask for Booklet

A highly important discovery by a practical working tinner. A Perfect SOLDERING Flux, for GALVANIZED and ALL OTHER METALS. Shipped Ready FOR USE in TIN CANS on Approval.

THE RUBY CHEMICAL CO., Inc.
JOHNSTOWN, OHIO

FREE to anyone for asking **CATALOGUE** showing complete line of **TINNERS' AND ROOFERS' SUPPLIES.**
Large stock, great variety, prompt shipments.
Get our prices.

BERGER BROS. CO., OFFICE AND STORE, 237 Arch St.; WAREROOMS, 100-02-04 Broad St.; FACTORY, 3114-16-18-20 N. 17th St., PHILADELPHIA.

Inclinable Power Press

TOOLS FOR SHEET METALS

INCLUDING
Tinners' and Roofers' Tools,
Shears, Punches, Presses and
Dies, Can-Making Machinery
MADE BY

Niagara Machine & Tool Works,
BUFFALO, N. Y.

MARVEL

Patent applied for

PORTABLE PUNCH No. 20

Made entirely of STEEL
Punches ¼ in. hole in ¼ in. and equivalent
Let us send you one on trial.
Write for circular and price of this and other Marvel Punches and Shears.
ARMSTRONG-BLUM MFG. CO.,
106 N. Francisco Ave., Chicago, Ill.

TWO MORE REASONS WHY STEEL BRAKES EXCEL

OTHERS WILL FOLLOW

The strength of steel being approximately three times that of iron it is clear that much heavier work can be done with the same effort on a brake so constructed.

Another quality of steel is that it will not warp like wood nor get sprung as iron will, thus assuring a straight and perfect bend always.

A postal will bring you net prices F. O. B. your city.

DREIS & KRUMP MFG. COMPANY
Halsted and 32nd Street, CHICAGO

C. G. Hussey & Company

PITTSBURGH, PENNA.

Manufacturers of

Soft Copper,	Copper Nails and Tacks,	Cold Rolled Copper,
Copper Gaskets,	Tinned Copper,	Special Shapes Sheared or Stamped,
Copper Bottoms,	Polished Copper,	Slat ng Nails,
Soldering Irons	PROMPT SHIPMENT FR.M STOCK.	

Clayton, N. M., Aug. 27, '08.

THE AMERICAN ARTISAN:—
Please take out ad. Answers were very prompt.
Yours truly, R. W. ISAACS.

Style "A" Showing Method of Laying

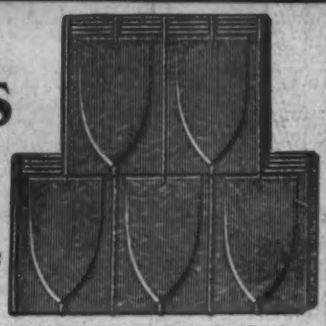
"TITELOCK" TRADE MARK

METAL SHINGLES

THE MOST PERFECT MADE

NOTE THIS ABSOLUTELY WATERTIGHT LOCK!

SEND FOR SAMPLES AND BOOKLET



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"Invisible Joint" TRADE MARK

STEEL CEILINGS

WRITE FOR CATALOG AND PRICES

MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS. KANSAS CITY, MO.

When Ordering **Charcoal Iron Conductor Elbows**

Specify With

GUARANTEE *F. Dieckmann* Stamped in the Metal.

CHARCOAL IRON

Makers of the Elbows which can be erected without Refitting and Solder, save Labor and Material.

THE FERDINAND DIECKMANN CO.

Station B, CINCINNATI, OHIO

PATENTED

Mimco Solderless Couplings

NO SOLDER (Patented) NO SOLDER

Do away entirely with wiping joints. A practical article and BIG SELLER.

Send for Descriptive Circular and Price-List.

MODERN IMPROVEMENTS MFG. CO.

468-470 17th Street • BROOKLYN, N. Y.

Empire Door Holder

Improved

90 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.

CALDWELL MFG. COMPANY

41 Jones St., Rochester, N. Y.

J. F. LEWIS, Cisco, Ill., Writes "I cannot get along without The American Artisan"

Drink Pure Water

The No. 50 Star Pump shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the Doctor's bill many times over.

Then it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

STAR BUCKET PUMP CO.

ST LOUIS, MO.

WE HAVE A HARDWARE DELIVERY WAGON THAT YOU CAN DEPEND UPON

Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

Easy to Load and Unload

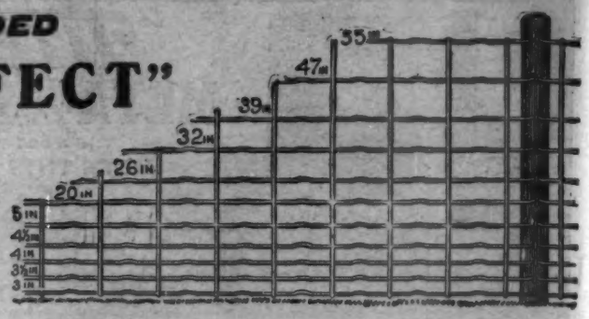
Durability guaranteed. Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 Edwards St., Sycamore, Ill.

Eliminate All Your Fence Troubles by Using the

ELECTRICALLY WELDED

"PITTSBURGH PERFECT" Fences



The strongest on the market and the most satisfactory. You can't know what a really good fence is until you have tried the

"PITTSBURGH PERFECT."

WRITE FOR OUR CATALOG TO-DAY.

Pittsburgh Steel Co., Pittsburgh, Pa.

Shelf Boxes,
Hardware Shelving,
Counters,
Screw, Bolt and
Seed Cases,
Store Ladders,
Glass Cutting Boards,
Immediate Shipments,
Send for Booklet.

W. B. HELLER & CO.,
MONTPELIER,
OHIO

DEALERS! Here is a sample of our Farm Advertising

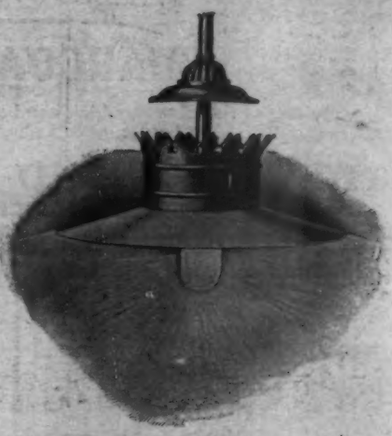
Handle ours and you will be on the right side. The farmer knows about them. We have a branch at Kansas City and can ship on short notice.

"THE DENNING" CORN CRIBS AND GRAIN BINS

Will store your whole crop at a nominal cost.
"THE DENNING" FENCE
Will take care of your poultry, hogs and stock.
"THE DENNING" LAWN FENCE
Will ornament your premises.
Ask your dealer for "The Denning." Take no substitute.

THE DENNING WIRE & FENCE CO. CEDAR RAPIDS, IOWA

The EVEREADY GAS SYSTEM Requires No Generating



Nothing like it now on the market. No worry, no work, no odor, no smoke, NOISELESS. Will light a store 100x30 ft. two hours a night for 10c a week. Always ready for instant use. Turn on the gas and light the same as city gas. Can be installed for a very small amount.

SEND FOR DESCRIPTIVE MATTER AT ONCE
LIBERAL CONTRACTS TO LIVE AGENTS

Eveready Gas Company,

Department No. 31. Lake and Curtis Streets Chicago, Ill.

- SHELVING -
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

INTERCHANGEABLE
LOCK-CORNER
SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

The Largest Assortment of HONES in the world.

Also a complete line of cutlery, razor strops and hardware specialties.
S. R. DROESCHER, Importer and Mfr.
79 Warren St., New York, N. Y.

THE Ideal Epworth Acetylene Co.

INCORPORATED

Write for Circulars and Terms

The Ideal Epworth Acetylene Generators

Are Ideal in construction, Ideal in light producing power, Ideal in giving out steady light, Ideal in selling qualities, Ideal in lighting Dwellings, Stores, Hotels, Churches and Towns. Acetylene light is the safest, best, cheapest, brightest, finest light in the world, when produced in the Ideal Epworth Generators.

Satisfaction Guaranteed. Agents Wanted.

IDEAL EPWORTH ACETYLENE CO., JOHNSTOWN, PA. (Successors to Epworth Gas, Light & Heating Co., Waterloo, Iowa) WATERLOO, IOWA

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS

OF EVERY DESCRIPTION AND FOR ALL PURPOSES

FOR SCREENS OF ALL KINDS

No. 212 NORTH UNION STREET, CHICAGO, ILL.

New York Office, 114 Liberty Street.

You Are Invited to Take Notice of the

White Lily Motor Washer

¶ It will be a valuable addition to your line. ¶ This new Water Motor Machine is of standard **White Lily Quality** throughout. ¶ The motor is small and compact, but powerful. ¶ It is of the simplest construction, there being no springs in the cylinder, and only one in the piston. ¶ Wearing parts are all brass—Tubs of selected Louisiana cypress—Stave legs—Mahogany finish.

Operates on Very Low Pressure

WHITE LILY MFG. CO.

1500 Rockingham Road, Davenport, Iowa

We have the best Pure Copper Cable

Lightning Rods

and fixtures on the market, and to prove what we say is right, we are willing to send any firm a sample outfit and they can look it over, and if it is not the best they have ever seen, and not satisfactory in every way, we want the whole shipment returned at our expense and it costs them nothing. We manufacture all our own goods and know just what they are, and we want every hardware dealer to write to us for prices and territory. We give a $500.00 guarantee and also one of our improved static machines.

WRITE TODAY TO

Maher & Son Lightning Rod Co., Preston, Iowa

"ELECTRA" PURE COPPER LIGHTNING RODS AND FIXTURES

NOTHING BETTER PRICES RIGHT WRITE US

To convince you we mean what we say, let us ship you an outfit upon approval. If you don't like it, you may return it to us at our expense

ELECTRA LIGHTNING ROD CO., 220-240 Market Street, CRESCO, IOWA

Blick No. 3 The Best Box

For Rural Free Delivery

Be Just With Customers

Sell them Blick No. 3 boxes. They are big ones, 6½ x 8½ x 19 inches. Made of heavy galvanized steel. Painted green, the new government color. Same shape and color as city boxes. Have Positive Locking Flag Signal, Automatic Latch, Watertight Quality. Every box tested, every box right, every box warranted. They will get the business. You better get them. Order now.

$5.88 per Doz.

Blick - Williams Co.

Indianapolis, Ind.

LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

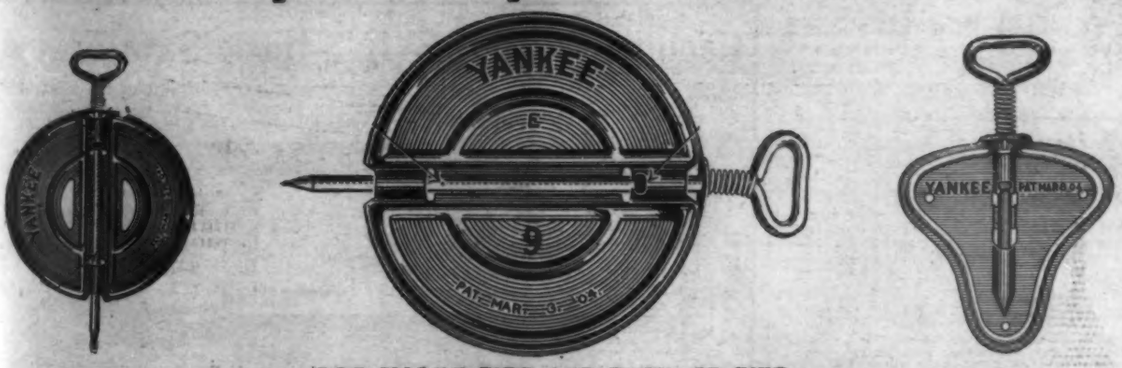
E. A. FOY & CO., Cincinnati, Ohio

Trade Supplied at Lowest Rates.

Send for Catalogue "B."

THE AMERICAN ARTISAN Keeps You Posted.

YANKEE [All Steel] DAMPERS and CLIPS



FOR SMOKE PIPE AND FURNACE PIPE

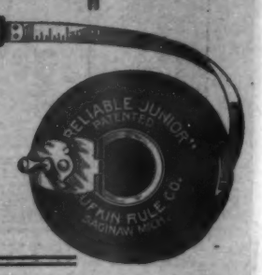
THE S. M. HOWES COMPANY. 40-46 Union St., BOSTON

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.



Please Mention The American Artisan

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.

New York London, Eng. Windsor, Ont.

DISSTON SAWS

Run Easiest
Cut Fastest
Last Longest

To the practical Saw User this tells the full story of HIGHEST PERFECTION in Material, Temper, Design and Workmanship attained for the DISSTON BRAND OF SAWS.

HENRY DISSTON & SONS, Inc.

Keystone Saw, Tool, Steel and File Works

PHILADELPHIA, PA.

A NEW PATTERN STANDARD LEVEL—Two Level Glasses, One Plumb Glass

Side glasses may be reversed at any time; all easily adjustable; all glasses in plain view from both sides; brass trimmings on both sides.

No. 31—Solid Cherry.
No. 32—Three-piece Cherry.
No. 33—Solid Mahogany.

THE BAKER - McMILLEN COMPANY, Akron, Ohio.

STRAP & T HINGES
Pressed Steel Shelf Brackets

BUTT HINGES
Barn Door Hangers and Track

Our Planished Steel **STRAP and T HINGES** are now all made on Automatic Machinery—Every one is as true as a Die. Our **BUTTS** are unequalled in Workmanship and Finish, All our Goods Guaranteed—**BEST IN THE WORLD.** (And they cost no more.)

THE GRIFFIN MFG. CO., 1500 Cherry St., Erie, Pa.

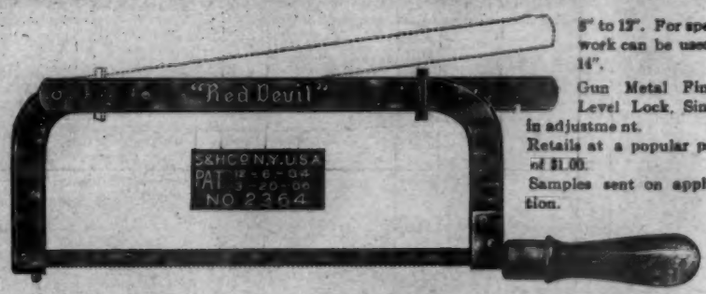
THE FRANKLIN WIRE STRETCHER

A One Man Wire Stretcher. Sold by Jobbers and Handled by Factories

Our stretcher is self-locking, locks at every point, is very light. We are able to pull up to within fifteen inches of the end posts, and are not obliged to set a post beyond, as with most other stretchers.

C. F. SMITH COMPANY. - De Kalb, Ill.

Genuine "RED DEVIL" Hack Saw Frame



8" to 12". For special work can be used on 14".

Gun Metal Finish, Level Lock, Simple in adjustment.

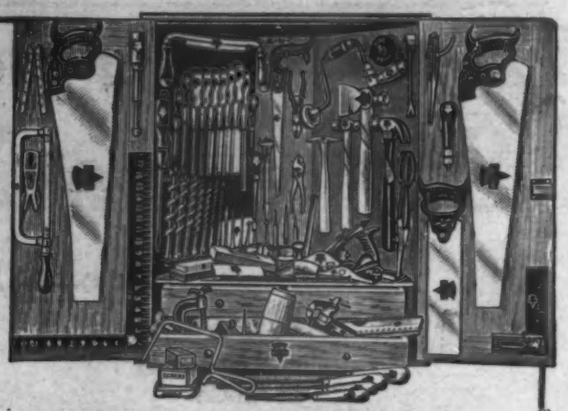
Retails at a popular price of $1.00.

Samples sent on application.

Order through your jobber or direct from us. Insist upon the Genuine "RED DEVIL."

SMITH & HEMENWAY CO., 108-110 Duane Street, New York City

Order Now



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TOOL CABINETS FOR THE HOME AND SHOP

KEEN KUTTER TOOL CABINETS are the only Tool Cabinets made containing a Complete Set of Guaranteed Tools under ONE NAME and TRADE MARK.

Each Cabinet, besides a Complete Set of Tools, includes various Accessories, such as Sandpaper, Wire, Screws, Nails, Glue, Tacks, etc.

KEEN KUTTER TOOL CABINETS come in all Styles and Sizes.

All KEEN KUTTER TOOLS are sharpened and set, READY FOR USE.

The KEEN KUTTER TOOLS are the STANDARD LINE OF AMERICA.

The KEEN KUTTER TRADE MARK (KEEN KUTTER) on EACH TOOL means—THE BEST THAT MONEY AND BRAINS CAN PRODUCE.

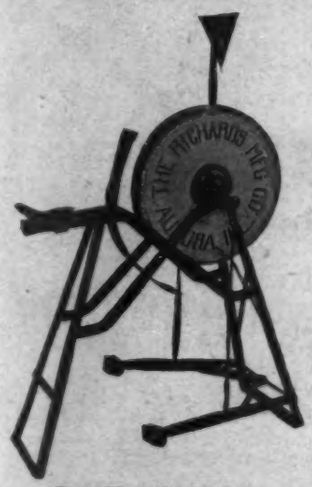
Each one tested for FINISH, SHARPNESS, TEMPER, STRENGTH, ACCURACY and BALANCE, and every KEEN KUTTER Tool is GUARANTEED to be SATISFACTORY.

Tool Cabinet Booklets, with Your Firm Name printed on, FURNISHED FREE. Can furnish, FREE to You, Complete Newspaper Advertisements.

See Our Salesmen or Write Us for Prices. Address DIVISION 5

SIMMONS HARDWARE COMPANY, INCORPORATED **St. Louis, Mo.**

Richards Cycle Ball-Bearing Steel Frame Grindstone



EASY TO SELL

Built on up-to-date mechanical principles. Stone guaranteed best quality Berea grit for general grinding. The frame is the strongest and most rigid on the market on account of its peculiar construction.

Made by

The Richards Manufacturing Co.

Aurora, Illinois

"Yankee Tools"

Are Without Equal in Quality or Efficiency in Practical Use

New Styles—Have You Seen Them?

MAGAZINE RATCHET SCREW DRIVER, NO. 65

RATCHET DRIVER with SCREW HOLDER NOS. 110-111-115

RATCHET "SCREW EYE" DRIVER, NOS. 80 and 81

ASK YOUR JOBBER ABOUT THEM

Send for "Yankee" Tool Catalog.

North Bros. Mfg. Co., Philadelphia

CUT THIS OUT

To the Publishers **The American Artisan and Hardware Record**
385 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address..... Town..... State.....

Our New No. 5

Self Basting Roaster

Made in Four Enamels

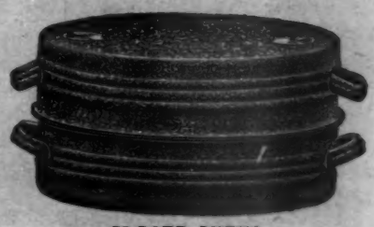
GRAY
Agate-Nickel-Steel
El-An-Ge

WHITE-LINED
Robin-Egg Blue
Turquoise

Also in Black Steel Lacquered

OPEN VIEW

One of the best and most serviceable articles we manufacture.



CLOSED VIEW

LALANCE & GROSJEAN MFG. CO.

NEW YORK CHICAGO BOSTON

We want every subscriber to THE AMERICAN ARTISAN to have a copy of our new Booklet, entitled SIMPLE SYSTEM. It's free. A postal will do.

W. B. HELLER & CO.
MONTPELIER, OHIO

You're Losing Money Every Day You Wait—The

SHRP-SHAVR SAFETY RAZOR

at 25 cents

is the quickest selling and biggest business-building proposition you've ever had a chance to get in on,

A complete Safety Razor, with a money-back guarantee **for 25 cents**—an absolute virgin field of customers to draw from—**a continuous sale of blades**—a magnet that pulls a mass of new buyers into your store for shaving soap, strops and all shaving accessories—and a clear profit of 50% on every single one of the hundreds of razor sales—that's exactly what you're losing every day you delay in putting in a stock of Shrp-Shavr Razors.

Have you read our advertising in the Saturday Evening Post, the Associated Sunday Newspapers, and other big circulation publications? We're telling every man in this country about the SHRP-SHAVR. We are getting hundreds of inquiries from your territory and from every town and city in America. We have already shipped to twenty-three different countries and they are coming back for more.

We're spending thousands of dollars to create customers for you. Co-operate with us. Do your share and get your share. We're working tooth and nail for you in the magazines. Won't you take your part of the profits that are waiting for you?

Write your jobber or if he will not supply you order direct, and get your share of the Shrp-Shavr business.

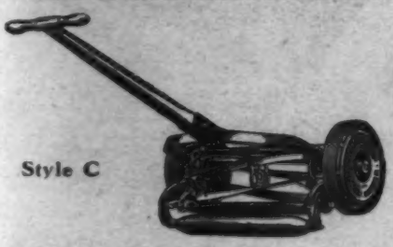
PRICES—SHRP-SHAVR RAZOR with one blade, per dozen, $2.00. SHRP-SHAVR BLADES, 5 in a pkg., per dozen pkgs., $2.10. SHRP-SHAVR STROPPERS, per dozen, 75c.

SHRP-SHAVR RAZOR COMPANY, 70 Duane St., New York City

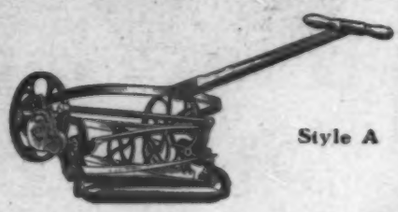
The Genuine

Philadelphia

Lawn Mowers



Style C



Style A

Recognized as

Standard Mowers

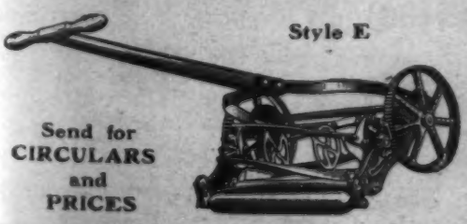
The World Over

They are guaranteed against imperfections and warranted to give entire satisfaction.

Be sure you handle the lawn mowers with the words PHILADELPHIA LAWN MOWER CO. cast on the wheels. They are the mowers that will entirely satisfy your customers.

The Philadelphia Lawn Mower Co.

3101 to 3109 Chestnut Street PHILADELPHIA, PA., U. S. A.



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Send for CIRCULARS and PRICES

Simple in construction, light running, durable. The best Hand and Horse Mowers on the market.

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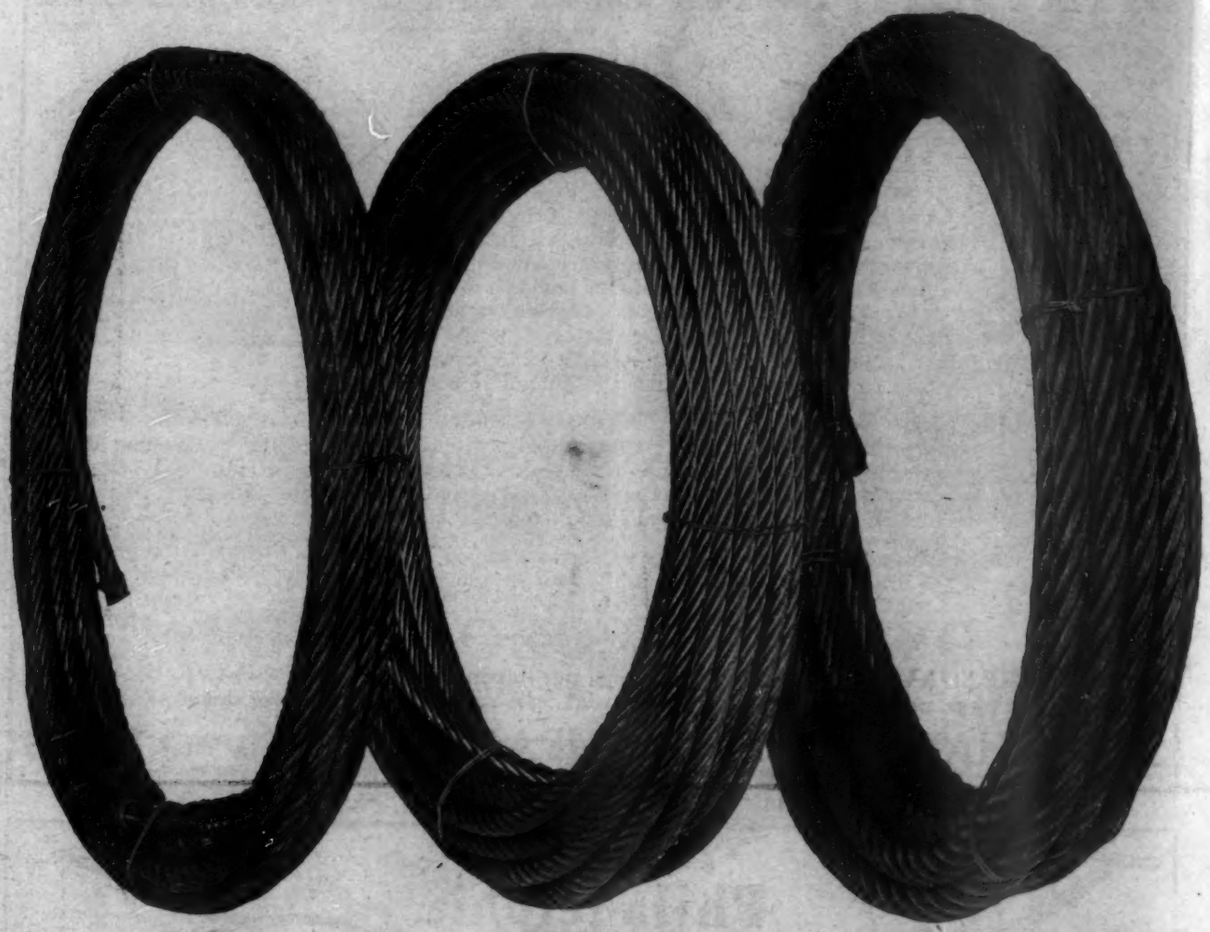
Sold direct or through our distributers.

Large stocks carried at convenient points all over the country, ready for quick delivery in either short or long lengths, on reels or in coils.



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¾-in. Crucible Cast Steel Hoisting Rope

202 Feet
¾-in. Monitor Dredge Rope, 6 x 19

78 Feet
1-in. Plow Steel Hoisting

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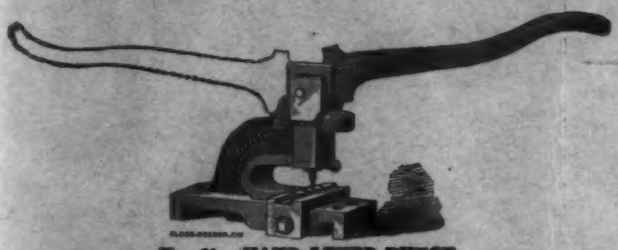
IN the great work of reclamation of the submerged lands of the Mississippi Valley there is no more active mechanical factor than our dredge rope. We make this rope with full knowledge gained from years of experience in the hard usage to which it is subjected, than which perhaps no other service can show an equal. There is not the same risk of life that goes with the operation of an elevator or a mine hoist, but there is greater wear, necessitating a very close study of the requisite quality of material and also experience in manufacture, to produce a flexible, reliable and durable dredge rope.

We offer our rope to dredgemen with assurance of the highest *uniform* quality and efficiency, as proven by the many years that it has now been successfully identified with this service.

American Steel & Wire Co. Chicago New York Worcester Denver San Francisco

CORNICE BRAKE

No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3¼-inch.
Weight, 20 pounds.



No. 61. HAND LEVER PUNCH
Will punch $\frac{3}{16}$-inch holes in ⅛-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
CINCINNATI, O., U. S. A.

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815 State Street, Bowling Green, Ky., Sept. 1, 1908. JOHN F. CARTWRIGHT.

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"Enterprise" Sausage Stuffers and Lard Presses

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Accurately-bored cylinder. Lips on the inner tin cylinder to make easy its handling when heated. No hot iron cylinder to handle when pressing lard. A patent latch which prevents breaking of plates. Patent corrugated spout prevents air entering the casing, thus assuring preservation of sausage.

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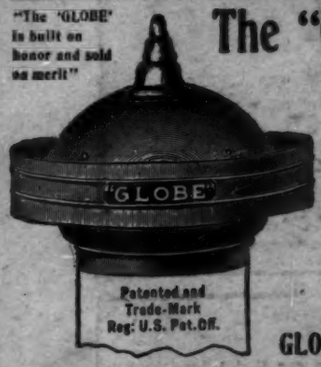

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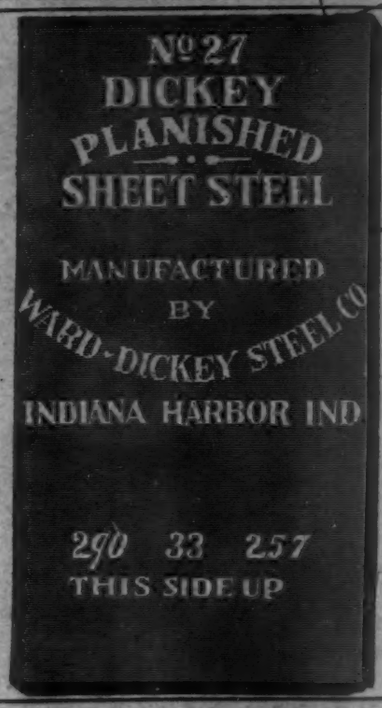

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